

INDUSTRY OVERVIEW

Investors should note that CRU, an independent consultant with over 40 years' experience in the metals and mining industry, has been engaged by the Company to prepare an industry report for use, in whole or in part, in this prospectus. CRU prepared its report based on CRU's in-house database, independent third-party reports and publicly available data from reputable industry organizations. Where necessary, CRU contacted companies operating in the industry to gather and synthesize information about market, prices and other relevant information. CRU has exercised reasonable care in ensuring that the information and data which it relied on are complete and accurate.

CRU has provided part of the statistical and graphical information contained in this Industry Overview. CRU has advised that (i) some information in CRU's database is derived from estimates from industry sources or subjective judgments; and (ii) the information in the database of other mining data collection agencies may differ from the information in CRU's database. We believe that the sources of the information are appropriate sources for such information and have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. The information has not been independently verified by us, the Joint Sponsors, the Underwriters or any other party involved in the Global Offering and no representation is given as to its accuracy.

SOURCE OF INFORMATION

We commissioned CRU, an independent consultant, to prepare a report to provide an overview of the global copper industry, and an overview of the global silver and molybdenum markets. CRU has received a commission of £83,000 from us for the report. CRU has compiled the report based on historical and forecast data from its affiliates as released, in particular, data and information compiled with respect to projects and mines for its Copper Long Term Outlook February 2012, Copper Concentrates Service and the Copper Quarterly Report July 2012. CRU is a research and consulting company specializing in the international metals, mining and electricity industries.

The statistical and graphical information contained in this prospectus was derived from CRU's report. CRU prepared its report based on information in its in-house database, independent third-party reports and publicly available data from reputable industry organizations. Some information in CRU's database was derived from estimates from industry and subjective judgments. The information in the databases of other mining industry data collection agencies may differ from the information in CRU's database. Moreover, the copper, silver and molybdenum markets, prices and competitive conditions depend on a number of factors of an inherently unpredictable nature.

COPPER

Introduction to Copper

Copper is a major industrial metal used in various industries. It is usually found in the Earth's crust in compound form as part of a sulphide or oxide based ore. Copper is malleable, ductile, water resistant, germicidal, and possesses high thermal and electrical conductivity, being the second most

INDUSTRY OVERVIEW

electrically conductive metal after silver. In addition, copper is the main component in alloys, such as brass, bronze and cupronickel.

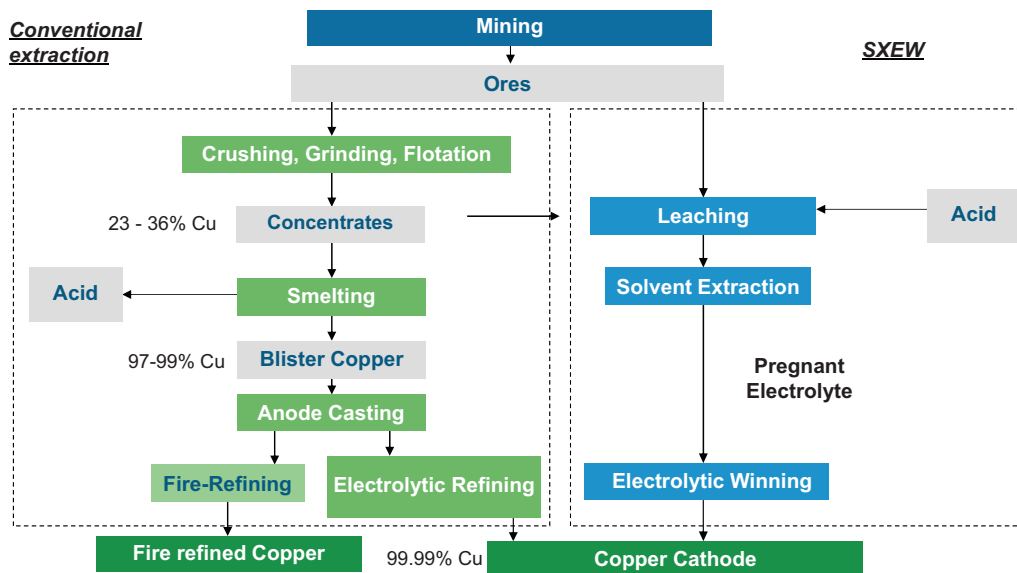
The primary copper production process consists of mining and extraction:

Mining. There are two mining methods, namely, open pit mining and underground mining. Open pit mining offers several advantages over underground mining, including less initial capital expenditure, better safety and other reduced risks. Compared to other non-mining participants in the copper value chain, including the operators of smelters and refineries, and producers of semis and final products, copper mining is capital intensive and typically generates higher profit margins.

Extraction. Copper is found in both sulphide and oxide based ores. Copper sulphide based ores, which account for approximately 80% of the worldwide annual copper mine output, are generally extracted through the conventional pyrometallurgical extraction process. In contrast, copper oxide based ores are typically processed through the SXEW process.

Set forth below is an illustration of the primary copper production processes for conventional pyrometallurgical extraction and SXEW extraction.

Primary Copper Production Process



Source: CRU

In the conventional extraction process for sulphide based ores, ores are crushed, ground and concentrated by froth flotation to produce a concentrate that typically contains approximately 23% to 36% copper. This copper concentrate is then fed into a smelter together with oxygen, where the copper is oxidized at a high temperature to produce impure molten metallic blister copper that contains approximately 97% to 99% copper. Blister copper is then cast into large slabs that are used as anodes in the electrolytic refining process that produces copper cathode.

INDUSTRY OVERVIEW

The SXEW process began to be used in the 1980s. In this process, sulphuric acid is used to leach copper from oxidized ores and mine waste. The SXEW process allows copper to be recovered from varying ore types, particularly oxidized minerals and sulphide copper minerals that have been oxidized by bacterial leaching. The SXEW process also has the ability to produce LME grade copper, but it requires the use of considerably more electricity compared to the smelting process.

Many elements are frequently found in the ores in which copper is found, with some having value and some being detrimental. Valuable elements, such as gold and silver, are extracted in the smelting process, and smelter operators typically pay by-product credits for these elements if certain threshold amounts are extracted. These credits lower the overall cash cost of the copper extraction process. Ores containing elements such as arsenic, antimony and bismuth may be deemed harmful or undesirable for copper recovery, if these elements exceed certain level in the copper concentrate, and can result in deductions or penalties being applied to the price of the copper product.

Major copper raw materials and products include:

- Copper concentrate, which is produced from mined copper sulphide ores and usually contains approximately 23% to 36% copper. Copper concentrate can be smelted to produce blister copper;
- Blister copper, LME grade or anode copper, which is extracted from copper concentrate, typically contains approximately 97% to 99% copper and can be electrolyzed into refined copper; and
- Refined copper, or copper cathode, which can be used to produce copper products or copper alloy, contains at least 99.5% copper. Primary refined copper refers to refined copper from copper ore and secondary refined copper refers to refined copper produced from copper scrap.

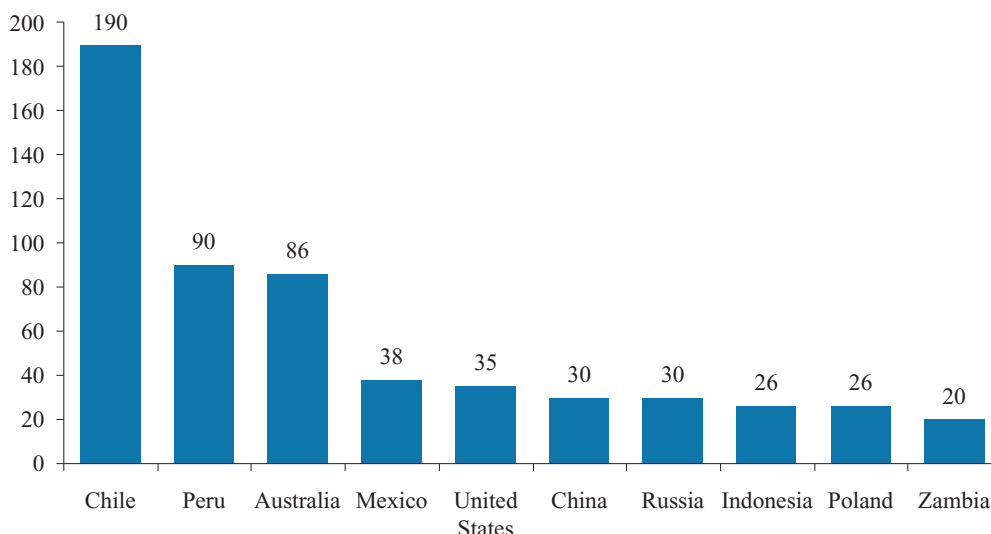
Global Copper Industry

Global Copper Reserves and Resources

As estimated by the USGS, world copper reserves amounted to 690 million tonnes in 2011. Set forth below are the top 10 countries, in terms of copper reserves in 2011:

Top 10 Countries by Copper Reserves in 2011

(in million tonnes of copper content)



Source: USGS, CRU

Copper reserves are geographically concentrated. In the aggregate, Chile, Peru and Australia accounted for 53% of the estimated global copper reserves, and the top 10 countries accounted for 83% of total estimated reserves in 2011.

Central and South America are the most important regions in terms of estimated copper reserves. Although Chile currently has the largest estimated copper reserves, most of those reserves have been extensively explored and most of its areas with copper mining potential are already owned by mining companies. Peru has the second largest estimated copper reserves in the world, with 90 million tonnes in 2011. Copper mines in Chile and Peru are generally larger in scale and the ores found therein are generally more polymetallic than those in other regions. For example, copper is usually found with gold in Peru, which was the sixth largest producer of gold worldwide in 2011. Copper mining in Peru is less developed than in Chile, but the gap of mine development and production between Peru and Chile is expected to narrow.

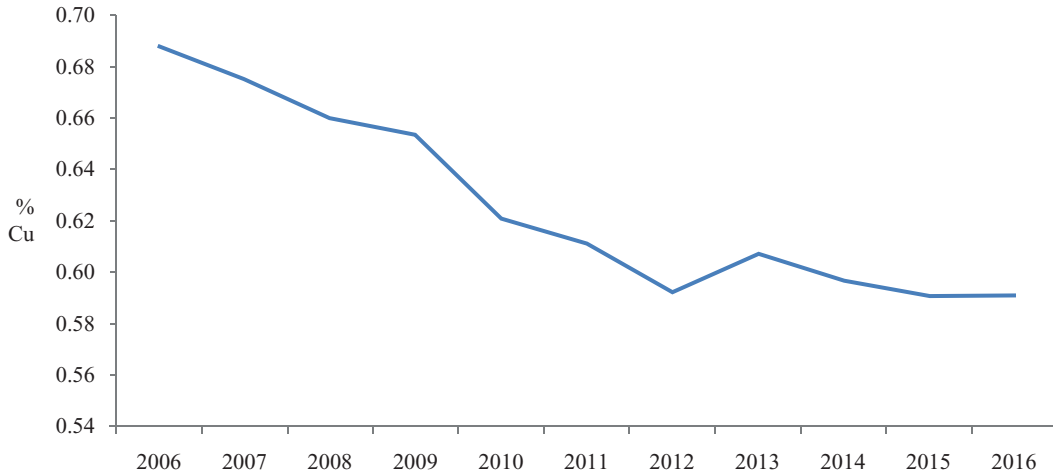
China was estimated to have 30 million tonnes of copper reserves in 2011. However, the copper mines in China are relatively small in scale and scattered, with lower ore grades on average.

The in-situ grades of ores in copper mines have been declining over the years. The latest data from a sample of 60 mine sites that produce copper concentrates in different regions of the world showed an average ore grade of 0.61% copper content in 2011, which was lower than the 0.69%

INDUSTRY OVERVIEW

copper content in 2006. Given the fact that ore grades typically decline with age, CRU expects this downward trend to continue. The chart below illustrates the declining copper ore grades in the 60 sampled mines and projects from 2006 to 2016:

Declining Copper Ore Grades in Existing Producing Mines and Projects
(% of copper content in ore)



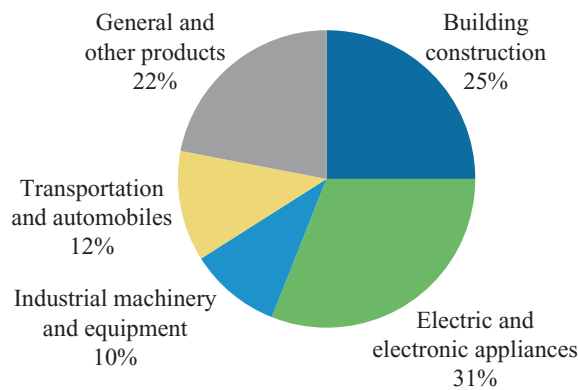
Source: CRU

Global Demand for Copper

Demand for Refined Copper

Refined copper is used in various industries. The electrical and electronic appliances industry, and building construction industry were the largest consumers of copper, which accounted for approximately 31% and 25%, respectively, of global refined copper consumption in 2011. As an essential material in major sectors, such as electrical and electronic engineering, manufacturing, construction and infrastructure projects, demand for refined copper is closely related to fluctuations in industrial production. The global demand for refined copper is expected to maintain a moderate growth rate from 2012 to 2016. Set forth below is a breakdown of global refined copper consumption in 2011 by end-use sectors:

World Refined Copper End Use in 2011



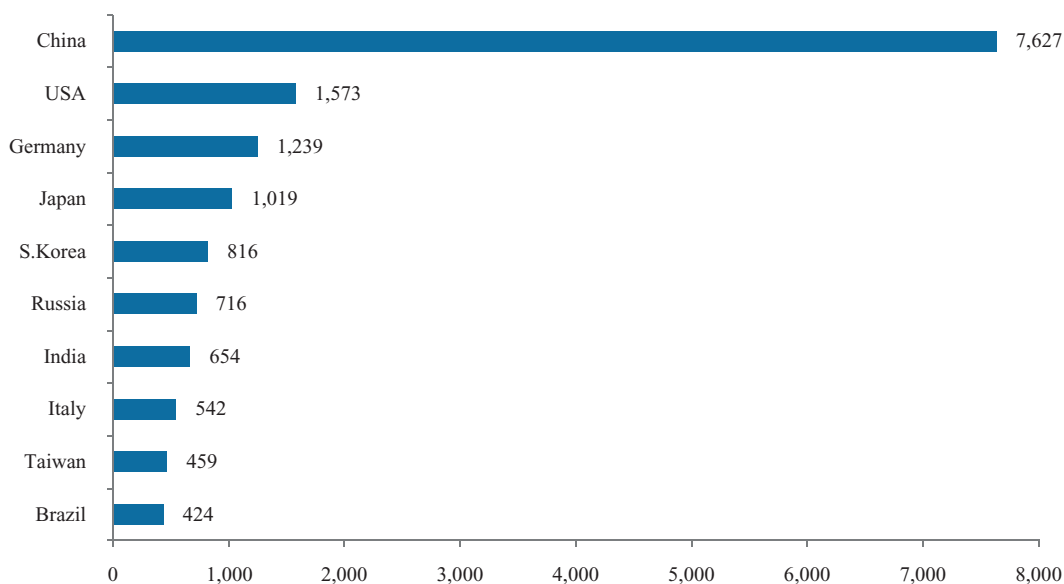
Source: CRU

INDUSTRY OVERVIEW

Global refined copper consumption increased moderately from approximately 16.9 million tonnes in 2006 to approximately 19.3 million tonnes in 2011. Set forth below is a breakdown of global refined copper consumption in 2011 by countries:

Top 10 Refined Copper Consumption Countries in 2011

(in thousand tonnes of copper content)



Source: CRU

CRU estimates that global refined copper consumption will increase to 20.7 million tonnes in 2013 from 19.9 million tonnes in 2012, mainly driven by expected growth in emerging markets, and expected restocking activity across the copper value chain since the slowdowns in growth of global refined copper consumption in 2008 and 2009. CRU estimates that global refined copper consumption growth will grow at a CAGR of 4.4% from 2012 to 2016.

In particular, CRU expects that China will continue to be the largest consumer of refined copper in the world up to 2016, with its consumption of refined copper growing at a CAGR of 6.6% from 2012 to 2016. Based on the latest official data, in 2011, China's refined copper consumption accounted for approximately 39.6% of global refined copper consumption. Refined copper in China was principally used for domestic housing construction and infrastructural projects, which have been the targets of significant government investment, in addition to the electronic appliance, automotive, industrial and general consumer products sectors, which have grown significantly in recent years.

Demand for Copper Concentrate

Demand for copper concentrate is driven by demand from smelters, which is in turn driven by demand for refined copper. Global smelting production reached 13.6 million tonnes in 2011, growing moderately by 2.7% from 2010. China, Chile and Japan are the top three blister copper producing countries. Global smelter production is expected to grow at a CAGR of 6.5% from 2012 to 2016, mainly driven by expansion in China, where smelter production is expected to grow at a CAGR of 14.3% from 2012 to 2016.

Global Supply of Copper

Supply of Refined Copper

From 2006 to 2011, global refined copper production grew at a CAGR of 2.4% to approximately 19.4 million tonnes. The growth was constrained by a decrease in the level of global copper mine output which was the result of slowdowns in the development of new copper mine projects and capacity expansion projects due to the global financial crisis. Additionally, the production level was adversely affected by a declining ore grade during that period.

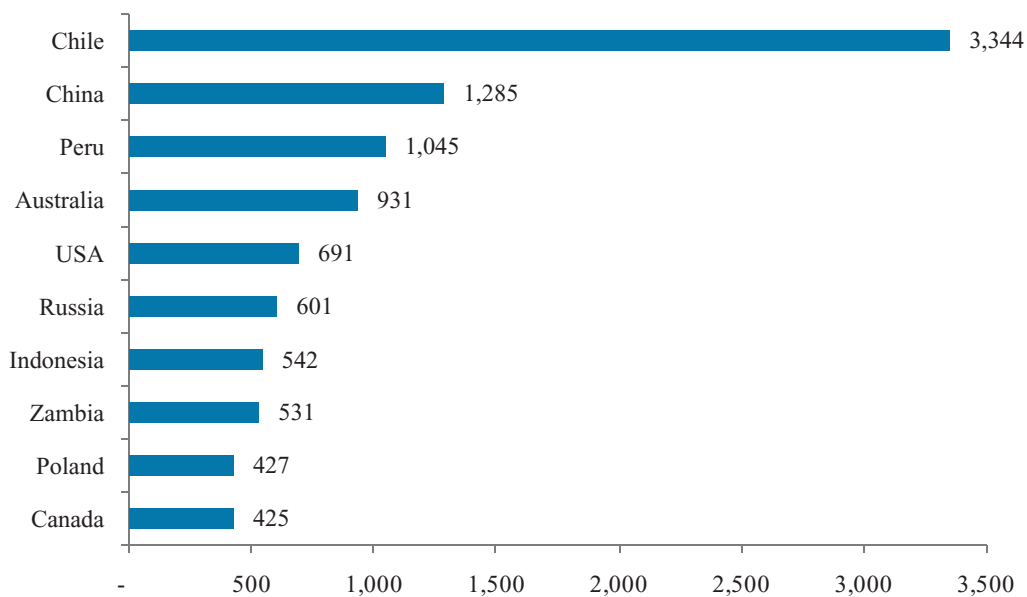
According to CRU, global copper mine production is expected to grow at a CAGR of 5.9% from 2012 to 2016, as several significant copper mine projects with an estimated aggregate annual output of 3.5 million tonnes of copper content are expected to commence operation during that period. CRU also estimates that global refined copper production will grow at a CAGR of 5.7% from 2012 to 2016.

Supply of Copper Concentrate

From 2006 to 2011, global copper concentrate production grew at a CAGR of 1.1%, reaching 12.4 million tonnes of copper content in 2011. South America remains the largest copper concentrate producing region in the world. Africa has seen the largest increase in copper concentrate production over the past five years, due to a series of copper mine projects commencing production. On the other hand, production has declined in Europe, North America, Argentina and Chile due to the falling ore grades and mine shutdowns. The chart below illustrates the top 10 copper concentrate producing countries in 2011:

Top 10 Copper Concentrate Producing Countries in 2011

(in thousand tonnes of copper content)



Source: CRU

INDUSTRY OVERVIEW

According to CRU, in 2011, China was the world's second largest copper concentrate producer after Chile. The copper concentrate production of Peru is anticipated to grow at a CAGR of 11.8% from 2012 to 2016, primarily driven by expected productions from the Toromocho Project, which is owned and operated by us, and the Las Bambas Project, which is owned and operated by Xstrata.

Copper Concentrate Trade

In 2011, global copper concentrate exports reached 17.2 million gross wet tonnes of copper concentrate, and the top 10 exporting countries in aggregate accounted for 88.3% of total copper concentrate exports worldwide. Chile, Peru, Australia and Indonesia are the most active exporting countries, which collectively accounted for 71.8% of global copper concentrate exports in 2011.

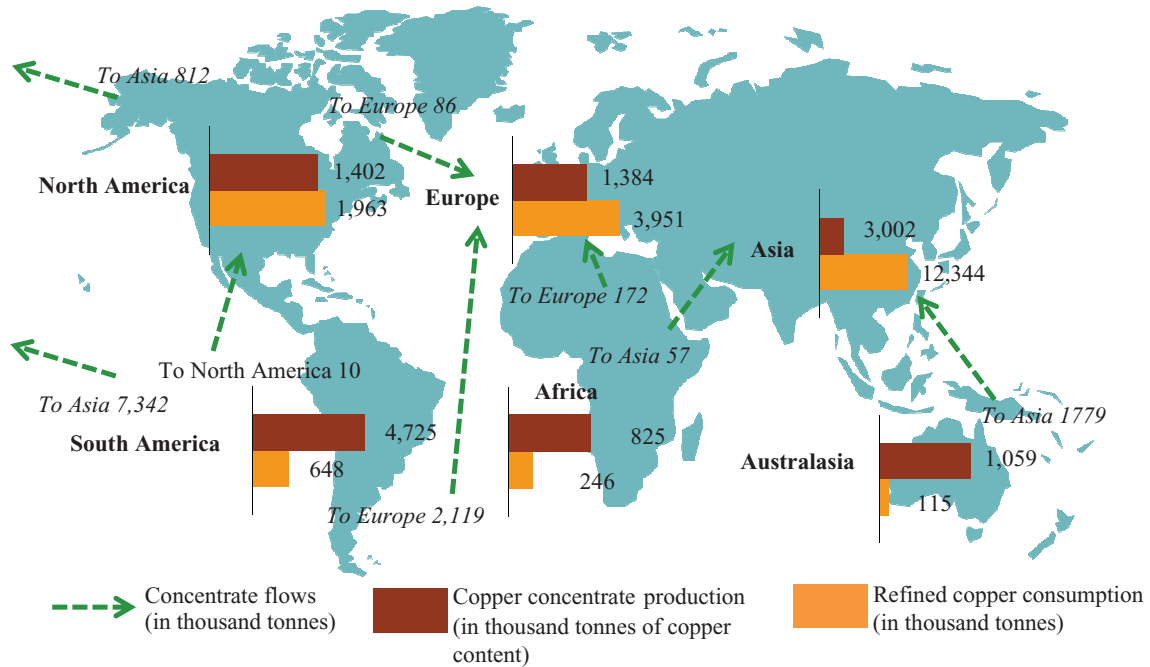
The copper concentrate exported from Peru increased from 1.8 million gross wet tonnes of copper concentrate in 2006 to 3.1 million gross wet tonnes of copper concentrate in 2011, representing a CAGR of 12.0%, primarily due to the growth in production output from domestic mining projects. In 2011, 1.0 million gross wet tonnes of copper concentrate were exported from Peru to China, accounting for 32.3% of the copper concentrate exports of Peru and making China its largest trading partner in terms of copper concentrate. In 2011, Peru was the second largest exporter of copper concentrates into China, representing 15.9% of China's total imported copper concentrates.

China, as the largest copper concentrates consuming country in the world since 2008, is facing shortfalls in domestic supply and significantly relies on copper concentrate imports from its trading partners to meet demand. Peru is the second largest copper concentrate supplier to China after Chile. The copper concentrate imported to China from Peru grew at a CAGR of 14.3% from 2006 to 2011, outpacing that of Chile, which is 2.5%.

INDUSTRY OVERVIEW

Japan, India and South Korea are the second, third and fourth largest copper concentrate importing countries, respectively. Underpinned by the strong demand from Asian countries and robust output from South American countries, such as Peru and Chile, copper concentrate trade between South American (exports) and Asian (imports) countries have become increasingly active and important, and accounted for nearly 42.8% of the global copper concentrate trade in 2011. Set forth below is an illustration of the global trade flow for copper concentrate importing countries in 2011:

Global Copper Concentrate Trade Flows in 2011



Source: Global Trade Information Service, Inc.

Copper Pricing

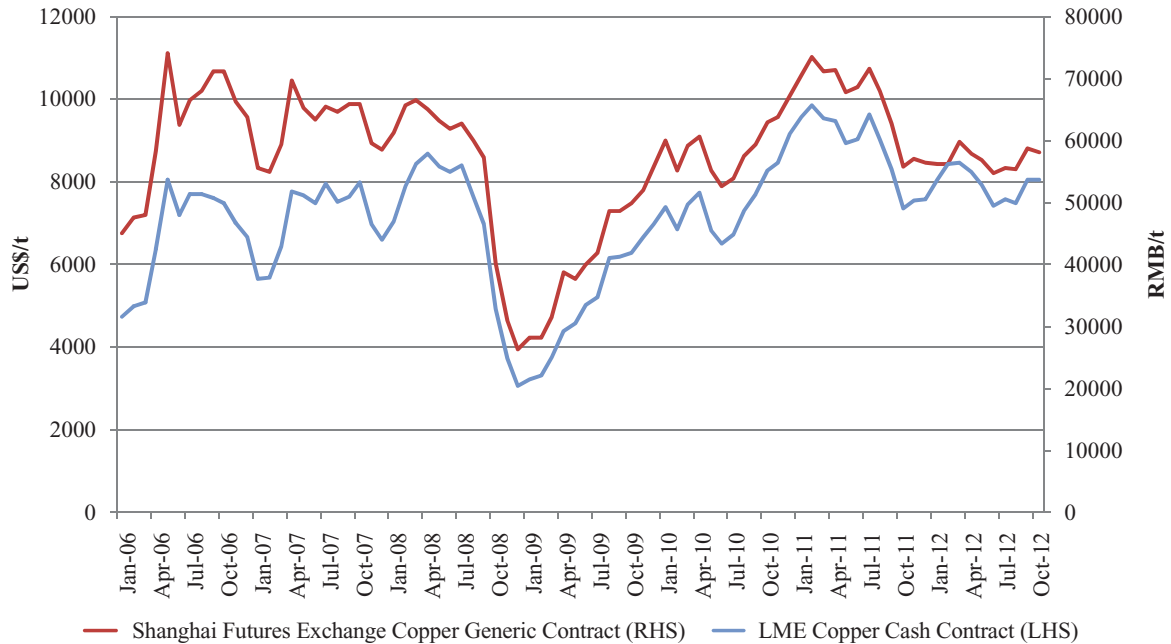
Refined Copper Pricing

There are three main copper futures exchanges in the world, namely the LME, which is based in London, the COMEX, which is based in New York, and the SHFE, which is based in Shanghai. The LME is the world's premier non-ferrous metals market and normally sets the benchmark prices for the refined copper market. The SHFE and the COMEX prices usually follow the trend of LME prices, but on some occasions they diverge from each other in response to local economic and market movements.

INDUSTRY OVERVIEW

Set forth below is a diagram of the historical refined copper price at the LME and the SHFE from January 2006 to October 2012 :

Refined Copper Price, January 2006 to October 2012



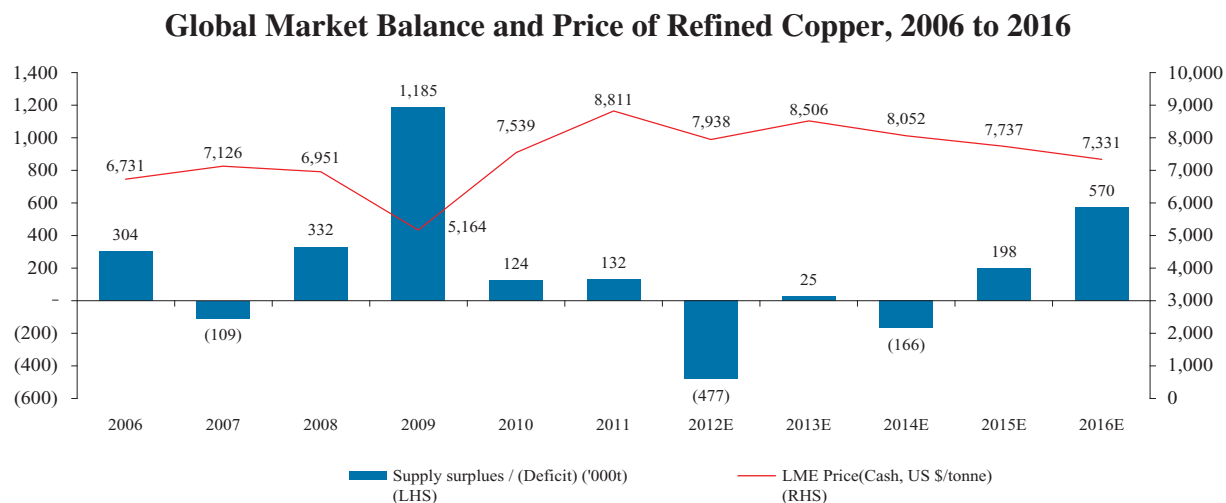
Source: CRU

Copper prices reached a four-year low in December 2008 when the global financial crisis hit the commodity market. However, prices subsequently recovered significantly and reached historical high levels above US\$10,000/tonne in February 2011. This was primarily driven by growth in copper demand from emerging markets and also influenced by investors' interest in hedging against the weakening US dollar, as well as the eased monetary policy during the two preceding years.

In 2012, copper consumption growth is expected to continue to be outpaced by that of copper production. Delays in the ramp up of copper production from new mine projects are expected to keep the market in deficit for 2012 and see stocks decline further in 2013. Modest copper supply surpluses are expected to emerge in 2013 before the balance is pushed into a deficit again in 2014. Beginning in 2015, as a number of delayed mining projects are expected to come on stream, surplus will continue to increase and a sizeable surplus is expected to develop by 2016. However, the estimation is highly dependent on the production of a number of mining projects schedule to commence production from 2012 to 2016. If the productions in these projects delay, the estimated copper price will need to be adjusted upward.

INDUSTRY OVERVIEW

Set forth below is CRU's data and estimation on refined copper market balance and prices from 2006 to 2016:



Source: CRU

The other major driver of copper prices is investors' interest. CRU anticipates that investors sentiment will remain volatile and be reflected in the actual trajectory of refined copper prices over the next five years.

Copper Concentrate Contracts and Pricing

There is no formal exchange for copper concentrates. The prices of copper concentrates are established through and governed by copper concentrate smelting contracts. A copper concentrate smelting contract is an agreement between a copper mine and a smelter/refinery for the purchase of a specified tonnage of copper concentrates over a certain timeframe.

The terms and conditions of the contracts cover payment to the mine for the metal content of the ore (including copper and by-products such as gold, silver and molybdenum), and also include a number of deductions to account for certain costs incurred by the smelter during the smelting process. Benchmark prices for the metal content are agreed between the contracting parties, which are normally based on the exchange prices, such as those of the LME, the COMEX or the SHFE. The metal content in concentrates is usually less than 100% payable. In order to allow for handling and processing losses, the percentage level is often referred to as metal payable level. The main deductions made from the payable metal contents are TC and RC. Additional deductions or penalties may be made for excessive levels of impurities in the concentrate and for moisture content above a certain level. The general pricing mechanism of copper concentrate is illustrated as follows:

(Benchmark price × copper payable level)

- + By-product credit (from elements such as gold, silver, molybdenum or others)
- Impurity penalty (from elements such as arsenic, antimony, and bismuth or others)
- TC/RC (either quoted on a spot basis or negotiated semi-annually in cases of long-term contracts)

INDUSTRY OVERVIEW

- Ocean freight and insurance (assume copper concentrates are sold on CIF terms)
- = the CIF price for the copper concentrate

Further information about the key components of copper concentrate smelting agreements is illustrated as below:

- Copper payable level:

Copper concentrate pricing is typically referenced to copper content of 27%-36%. Typically, 96.5% to 96.75% of the copper content is paid for, subject to a minimum deduction of 1 unit/percentage point. For concentrates with copper content of 29% or more, the percentage payable formula applies. For concentrates with copper content of less than 29%, the 1 unit/percentage deduction applies.

- TC/RC:

The TC is a charge levied at the smelting stage that is paid by miners, and typically expressed in US dollar per tonne of copper concentrate, which results in the charge per tonne of copper content varying depending on the composition of the concentrate. The RC is a similar charge levied at the refining stage of production, typically expressed in US cents per pound weight of refined copper. There are often imbalances between concentrate production and smelter and refining capacity which cause TC/RCs to fluctuate, resulting in volatile smelter revenues.

The TC/RC is set largely by the economics of the industry. Industry costs and revenues set the upper and lower limits for TC/RCs, with the upper limit defined by mine costs and revenues and the lower limit defined by smelter costs and by-product revenues. The supply/demand balance in concentrates will determine whether the upper or lower limits apply. Therefore, if the market is in deficit, terms will move towards the lower limit and vice versa. However, as these are agreed by annual negotiation, a number of subjective factors also come into play. For example, spot market developments can have a significant impact on the terms that are agreed in the contract negotiations as well as longer term supply and demand factors.

- By-product credit:

Similar to copper, by-product content must reach certain threshold before fees become payable and it depends upon the benchmark price agreed upon. Refining charges will be applied.

- Impurity penalty:

For reasons such as health and safety concerns, as well as copper recovery and smelting costs, copper concentrate smelting contracts normally stipulate both the amount of a penalizable element that can be present in the concentrates before a penalty is imposed, and the scale of charges that apply if the threshold is exceeded. Penalizable elements may include impurities such as arsenic, antimony, zinc, nickel and moisture.

INDUSTRY OVERVIEW

- Freight and insurance:

Mines are always responsible for the transportation costs associated with moving concentrates from the mine to a sea port, as well as any costs charges that are incurred in relation to storing copper concentrates at the sea port and the loading.

Other than auctions of individual shiploads of concentrates in the spot market on FOB terms, copper concentrates are normally sold on CIF terms, which means that the mine must pay for the cost of freight and insurance.

Copper Concentrate Market Balance

The global concentrate market has experienced deficit from 2006 to 2011, primarily because of the rapid growth of smelter demand from China. CRU estimates that the shortfall in copper concentrate supply will continue, but strong growth in mine supply will narrow the deficit from 2012. However, such trend is dependent on strong mine supply growth, which in turn depends on mine projects being commissioned on time and ramping up as scheduled. Set forth below is CRU's data and estimation on copper concentrate market balance from 2006 to 2016:

Global Copper Concentrate Balance
(in thousand tonnes of copper content)



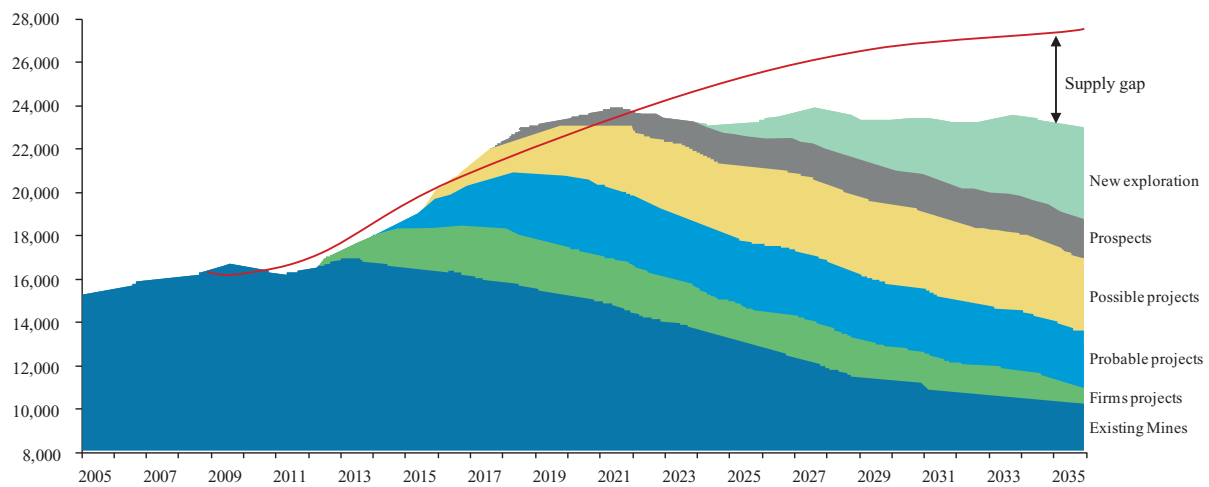
Source: CRU

CRU expects that the production from new mine projects will provide a significant boost to production in the short and medium term. However, a number of mining projects have experienced delays recently, primarily due to increased resource nationalism, concern over environmental issues

INDUSTRY OVERVIEW

and local opposition to development, as well as rising capital costs, the shortage of skilled workers and supplies and technical challenges. Moreover, over the long term, the productions from these mining projects will be largely offset by the effects of mine closures and declining ore grades at existing mines. According to CRU, production of copper concentrates will not be able to meet the increase in demand even if the potential production from all projects and the prospects (where exploration is at a relatively early stage) are included. Set forth below is estimation by CRU on mine production and demand from 2005 to 2035:

World Mine Production and Demand, 2005 to 2035
(in thousand tonnes of copper content)



Source: CRU

Overview of the Global Pre-production Copper Projects

As copper prices have escalated since 2010, the incentives for mines to produce more copper have increased. Accordingly, CRU expects the amount of mined copper to increase in the next few years. However, there are obstacles in relation to new projects coming on line, including the following:

- the debt crisis in the United States and Europe as well as the tight monetary policies worldwide could restrict funds available for project financing, which may cause project delays if the macro economy worsens;
- a decrease in the availability and commercial viability of world class deposits;
- increases in projects located in geographic areas with high political risks and profiles, such as Africa and Mongolia;
- national interest concerns on resource ownership;
- social and community issues;

INDUSTRY OVERVIEW

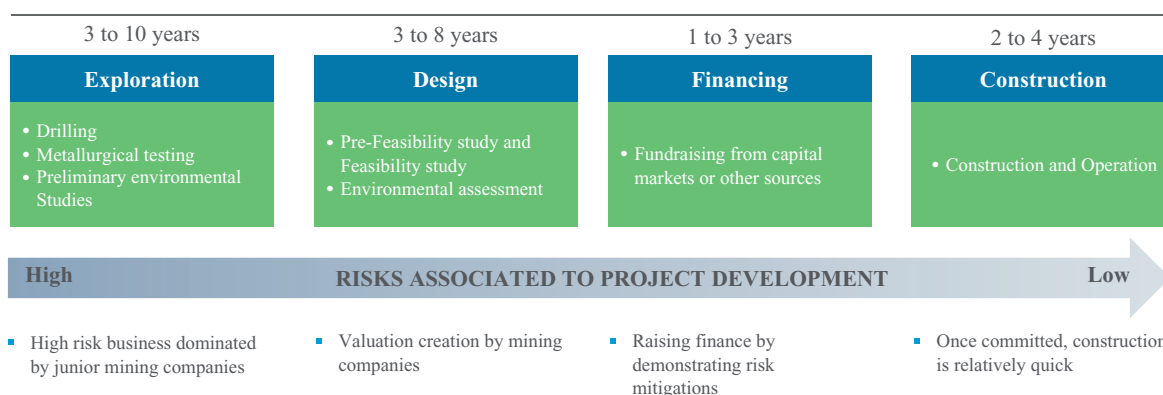
- environmental concerns that lead to higher operating and capital costs; and
- a lack of infrastructure for certain projects.

CRU's projected copper mine production CAGR of 5.9% over the period from 2012 to 2016 is dependent on the development of firm, probable and possible greenfield projects and brownfield expansions.

For mining projects in general, execution risks decrease as the projects progress towards production, while economics of the projects improves along the development process. CRU classifies greenfield projects as firm, probable and possible, as illustrated below:

| | <u>Firm Projects</u> | <u>Probable Projects</u> | <u>Possible Projects</u> |
|--------------------------|---|---|--------------------------------|
| Feasibility | Successful full / bankable / definitive feasibility study | Full / bankable / definitive feasibility study underway | Pre-feasibility study underway |
| Environmental Permitting | Granted | In progress | NA |
| Financing | Granted | In progress | NA |
| Board Approval | Underway | NA | NA |
| Construction | Underway | NA | NA |
| Technology | Modern and proven | NA | NA |
| Expected Start-up Time | 2 - 4 years | NA | NA |

According to CRU, the mining project lifecycle of a typical large copper development project with annual production volume of more than 200,000 tonnes of metal content consists of exploration, design, financing, and construction, as illustrated below:



Source: CRU

INDUSTRY OVERVIEW

Comparisons of Global Pre-production Copper Projects

Set forth below are descriptions of the top 20 firm brownfield and greenfield projects in the world scheduled to commence production from 2012 to 2016, ranked by their respective average planned annual production between 2012 and 2020:

| | Project Name | Country | Owner | Planned Annual Production ⁽¹⁾ | Ore Reserve | Ore Resource + Ore Reserve | Start-up Year | Mine Life |
|-----|---------------------------|-----------|---|--|---------------------|----------------------------|---------------------|-----------|
| | | | | (in thousand tonnes) | (in million tonnes) | | Year | Years |
| 1. | Oyu Tolgoi | Mongolia | Rio Tinto; Turquoise Hill Resources; Mongolian Government | 256.4 | 1,368 | 3,022 | 2013 | 58 |
| 2. | Las Bambas | Peru | Xstrata | 244.2 | — | 1,710 | 2014 | 20 |
| 3. | Toromocho | Peru | The Company | 192.2 | 1,540 | 2,234 ⁽²⁾ | 2013 | 32 |
| 4. | Grasberg Block Cave | Indonesia | Freeport-McMoRan Copper & Gold; Rio Tinto; Indonesia Government | 154.5 | — | 1,019 | 2016 | 26 |
| 5. | Antapaccay | Peru | Xstrata | 137.6 | 541 | 731 | 2012 ⁽³⁾ | 22 |
| 6. | Cobre Panama (Petaquilla) | Panama | Inmet Mining, KPMC | 136.2 | 2,319 | 7,916 | 2016 | 31 |
| 7. | Mina Ministro Hales (MMH) | Chile | Codelco | 130.7 | 285 | 1,246 | 2013 | 15 |
| 8. | Kamoto -KOV IV | DR Congo | Katanga Mining; Gecamines | 126.3 | 138 | 229 | 2013 | 45 |
| 9. | Konkola Deep | Zambia | Vedanta Resources; ZCCM Investment Holdings | 122.3 | 21 | 200 | 2012 ⁽³⁾ | 23 |
| 10. | Caserones-Regalito | Chile | Pan Pacific Copper; Mitsui & Company | 115.3 | 968 | 2,854 | 2013 | 30 |

INDUSTRY OVERVIEW

| Project Name | Country | Owner | Planned | Ore | Ore Resource | Start-up | Mine Life |
|--------------------------------|------------|---|-------------------------------------|---------------------|---------------|---------------------|-----------|
| | | | Annual Production ⁽¹⁾ | Reserve | + Ore Reserve | Year | |
| | | | (in thousand tonnes) | (in million tonnes) | | | Years |
| 11. Glogow Gleboki-Przemyslowy | Poland | KGHM Polska Miedz | 98.7 | — | 267 | 2013 | 30 |
| 12. Highland Valley Extension | Canada | Teck Resources | 96.1 | 623 | 1,553 | 2013 | 12 |
| 13. Sierra Gorda | Chile | KGHM, Sumitomo Metals and Mining; Sumitomo Corporation | 86.8 | 1,275 | 2,918 | 2014 | 21 |
| 14. Grasberg DMLZ | Indonesia | Freeport- McMoRan Copper & Gold; Rio Tinto; Indonesian Government | 82.2 | — | 510 | 2015 | 27 |
| 15. Morencil Expansion (Concs) | USA | Freeport- McMoRan Copper & Gold | 71.3 | — | 3,199 | 2014 | 9 |
| 16. Lomas Bayas II | Chile | Xstrata | 67.6 | 473 | 566 | 2012 ⁽³⁾ | 12 |
| 17. Pumpkin Hollow | USA | Nevada Copper | 58.0 | 368 | 716 | 2015 | 18 |
| 18. Bozshakol | Kazakhstan | Kazakhmys | 54.7 | — | 1,173 | 2015 | 40 |
| 19. Antuocya | Chile | Antofagasta Minerals | 52.6 | 642 | 1,106 | 2014 | 23 |
| 20. Tsagaan Suvarga | Mongolia | Mogolun Alt Corp. | 50.9 | — | 240 | 2014 | 14 |

Source: CRU

Notes:

(1) Based on average planned annual production between 2012 and 2020.

(2) The proved and probable reserves and the measured, indicated and inferred mineral resources are from two separate parts of the ore body, and are presented separately in the JORC reserve and resource tables.

(3) Production has commenced as of December 31, 2012.

According to CRU, based on the currently available information, the Toromocho Project ranks third in terms of target annual production of copper content and second in terms of ore reserve.

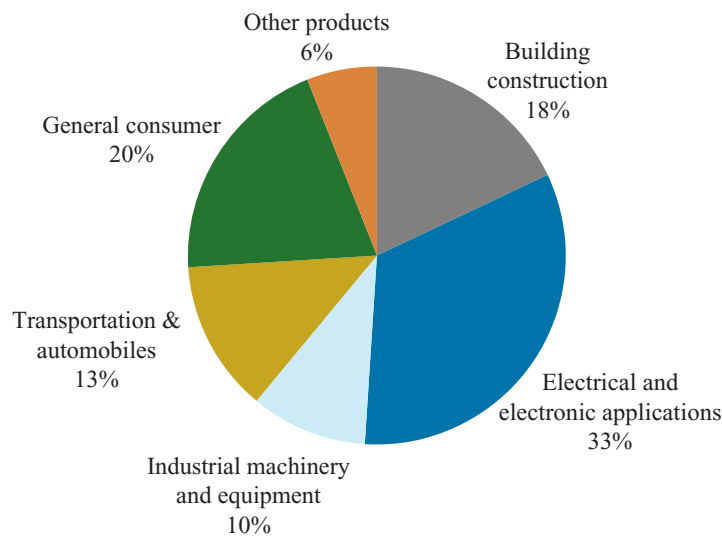
The Copper Market in China

China Copper Demand

Demand for Refined Copper

The top three sectors driving the demand for refined copper in China are the electrical and electronics, general consumer products, and building construction industries. Aggregate demand for refined copper from these sectors accounted for approximately 71% of the refined copper consumption in China in 2011. Set forth below is a breakdown of refined copper consumption in China in 2011 by end-use sectors:

China's Refined Copper End Use in 2011



Source: CRU

China is the world's largest refined copper consumer and is expected to continue to drive the growth in demand for refined copper. From 2008 to 2011, consumption of refined copper in China increased from 5.1 million tonnes to 7.6 million tonnes, representing a CAGR of 14.7%. This was mainly driven by the industrialization and production migration to China, which was led by heavy fixed assets investment. China is expected to consume 10.6 million tonnes of refined copper in 2016, representing a CAGR of 6.6% from 2012, accounting for 44.6% of expected global refined copper consumption in 2016. Ongoing heavy investments in the power generation sector, railways, automobile manufacturing, household electrical appliances and affordable housing sectors are expected to continue to drive the growth in demand for refined copper.

- The China State Grid plans to invest RMB1.7 trillion in the power grid and RMB2.0 trillion in the smart grid over the period of 2011-2015. Copper consumption is likely to benefit from power grid construction such as the electricity distribution network.
- Auto manufacturing and sales are set to continue growing under the 12th Five-Year Plan given relatively low car ownership. The Ministry of Finance and Commerce announced a new trade-in scheme, which offers vouchers of between RMB11,000 and RMB18,000

INDUSTRY OVERVIEW

redeemable when trading in/upgrading passenger vehicles in rural areas. Energy efficiency is likely to boost use of copper in engine control/management systems.

- Copper consumption in the railway sector will continue to grow despite the possible slowdown of the growth rate. According to the Ministry of Railways, China's investment into railways will amount to RMB2.3 trillion from 2011 to 2015, compared to RMB2.0 trillion from 2005 to 2010. The total mileage of China's railway operations is expected to rise from 91,000 km in 2011 to 120,000 km by 2015. The electrification rate will increase to 60% in 2015, compared to 46% in 2010.
- Home appliances and consumer products, including air conditioners and washing machines, are expected to see a strong growth since penetration levels remain low in rural areas. In June 2012, the PRC government announced a new home appliances incentive policy that will be valid for one year. It is estimated that the policy has a total value of RMB36.3 billion and is expected to stimulate consumption of home appliances after a decline in the first half of 2012 as the original subsidy scheme ended at the end of 2011.
- China Housing and Urban-Rural Development plans to invest RMB1.3 trillion to build 36 million units of affordable houses from 2011 to 2015. The National Development and Reform Commission announced that local government investment and corporate bonds issuance will give priority to the construction of affordable housing. The outlook for the social housing project for 2012 remains unclear however, as local government funding could still be a bottleneck. Commercial housing will also continue to grow despite the current tight policy on real estate market. The Ministry of Housing and Urban-Rural Development disclosed that by the end of 2009, urban housing area reached 30 square meters per capita compared to 6.7 square meters per capita in 1978, whereas rural housing area also grew from 8.1 square meters per capita to 33.6 square meters per capita over the same period.
- In September 2012, the PRC government approved approximately 60 infrastructure projects that had not yet started due to the lack of financing by the local governments. The total amount of the funding for these projects is estimated to be approximately RMB1.0 trillion.

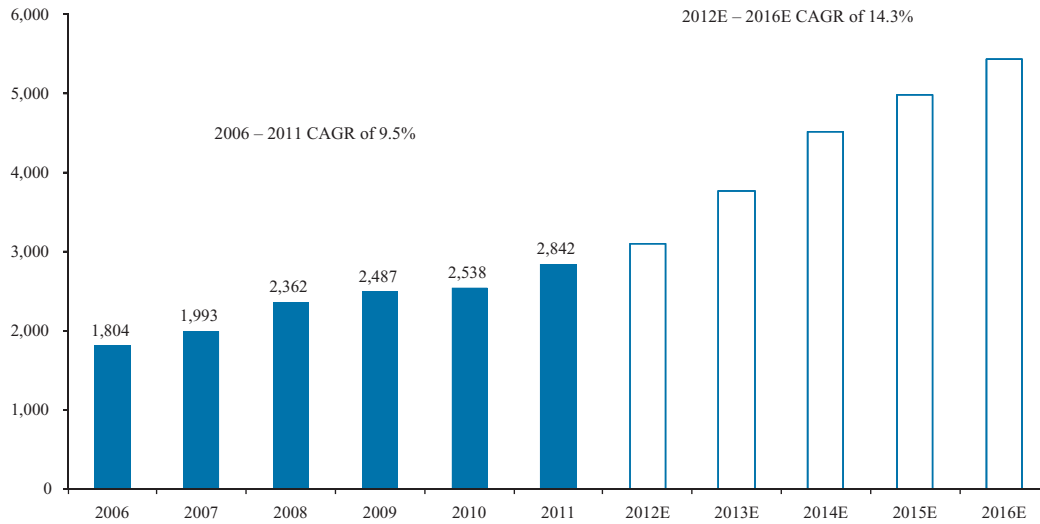
Demand for Copper Concentrates

China is the largest refined copper producing country, with its smelter production from copper concentrates growing at a CAGR of 9.5% from 2006 to 2011. According to CRU, China is expected to continue to drive the global demand for copper concentrates, with its smelter production from copper concentrates expected to increase by 2.3 million tonnes at a CAGR of 14.3% from 2012 to 2016. Despite the significant smelter production from copper concentrates in China in 2011, it only accounted for 56.7% of the refined copper produced in China in the year, which was lower than the global average of 70.3%, demonstrating potential for growth of Chinese smelter production from copper concentrates.

INDUSTRY OVERVIEW

Set forth below is the smelting production from copper concentrates in China from 2006 to 2016:

China Smelter Production from Copper Concentrates (in thousand tonnes of copper content)



Source: CRU

INDUSTRY OVERVIEW

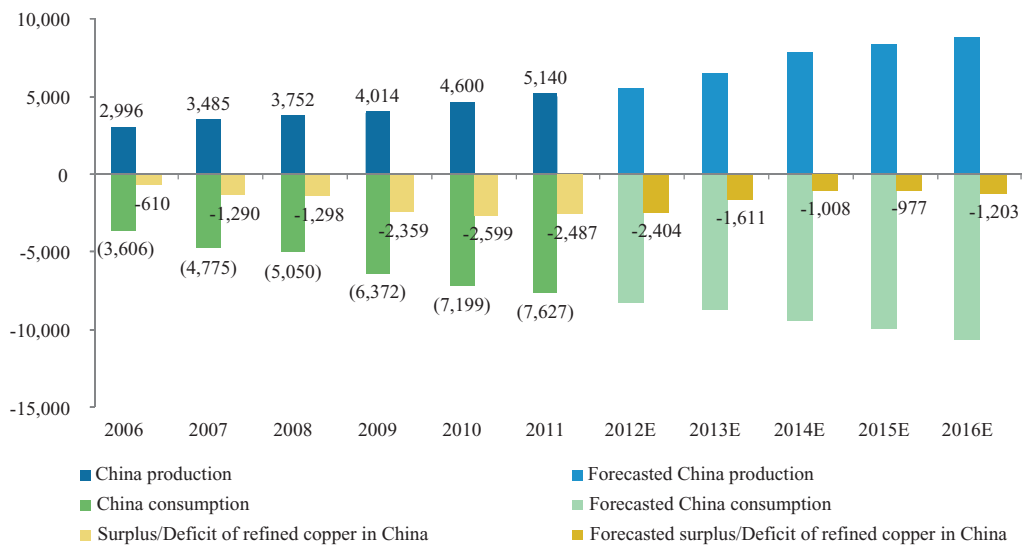
China Copper Supply

Supply of Refined Copper

While China consumed approximately 39.6% of the global refined copper in 2011, copper production in China has lagged behind the domestic demand. In 2011, China experienced a deficit in refined copper of approximately 2.5 million tonnes, an increase from a deficit of 610,000 tonnes in 2006. The deficit is forecasted to shrink to below 1.2 million tonnes by 2016, due to expected expansion of smelting capacity in China. However, if domestic raw material production does not increase, smelting production will be constrained and overseas sourcing will increase. The table set forth below illustrates the deficit of refined copper supply in China from 2006 to 2016, taking into account estimates for possible and probable projects that may come online during the forecast period:

Domestic Copper Market Balance in China

(in thousand tonnes of refined copper)



Source: CRU

INDUSTRY OVERVIEW

Supply of Copper Concentrates

Despite China being the largest copper concentrate producer in Asia and the second largest copper concentrate producer in the world, strong domestic consumption growth in China has outpaced the domestic concentrate supply. From 2012 to 2016, copper concentrate supply from domestic mines is expected to grow at a CAGR of 3.0%, which is lower than the estimated growth of domestic refined copper demand. This will likely cause a decreasing self-sufficiency rate for copper concentrates in China.

Domestic Copper Concentrates Market Balance in China
(in thousand tonnes of copper content)

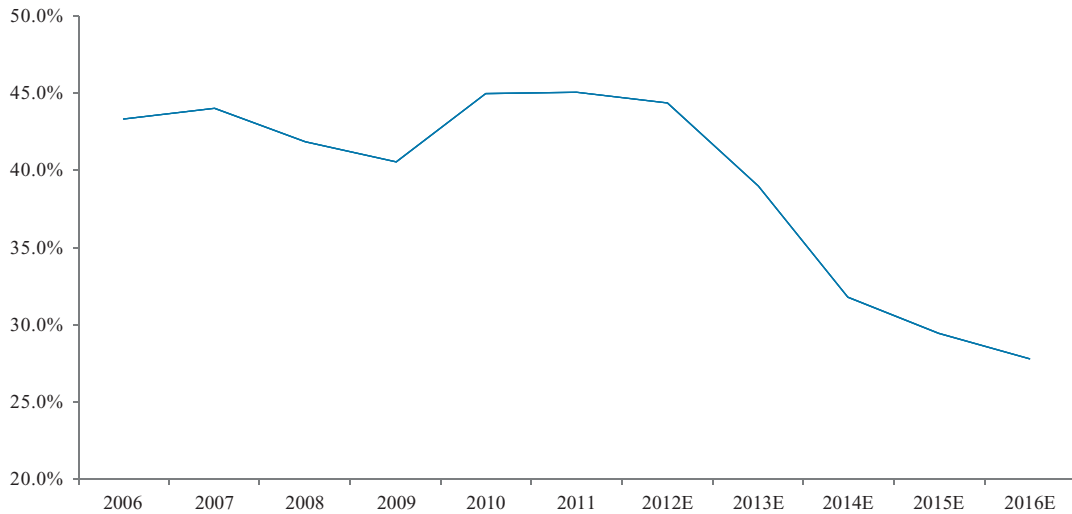


Source: CRU

China Copper Concentrate Imports

Due to insufficient domestic copper concentrates production, CRU expects China to remain a major importer of copper concentrates. The chart below illustrates the domestic copper concentrates supply in China as a percentage of smelting production from copper concentrate, or self-sufficiency rate, from 2006 to 2016:

Copper Concentrates Self-sufficiency Rate in China

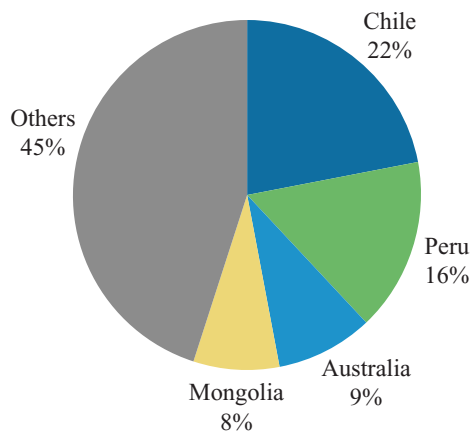


Source: CRU

Note: imported copper concentrates include copper concentrates produced by mines outside China but owned by Chinese companies

China surpassed Japan to become the largest concentrate importer in 2008. In 2011, China’s copper concentrate imports amounted to 6.4 million tonnes. Chile and Peru are the largest exporters of concentrates to China, with Australia and Mongolia also being important sources of supply. The chart below illustrates China’s major copper concentrates suppliers in 2011:

China Copper Concentrate Import in 2011 by Overseas Markets



Source: CRU

China Copper Price

In general, the SHFE copper prices closely track those of the LME, but the premium or discount between the two depends on a number of short-term considerations, such as the metal trade flows, exchange rates, local supply and demand, and taxation. The boundaries of the premiums or discounts are set by the arbitrage potential. When the SHFE and LME move too far out of line with one another, importing or exporting refined copper becomes attractive and is the mechanism that drives the market to return to equilibrium.

Copper Concentrate Pricing

Prices of copper concentrates are established through negotiations between buyers (typically smelting factories) and sellers (typically mining companies) on an annual or bi-annual basis.

Shipping cost is an important cost component in copper concentrate trading. In 2011, the spot market rate for shipping commercial lots of copper concentrates from Callao to the main Chinese Ports (such as Nantong, Jiangsu Province and Qingdao, Shandong Province) was approximately US\$48 per wet tonne. This rate is mainly a reflection of the current cost of chartering a bulk carrier. The ocean freight rate in 2011 from Callao to China of US\$48 per wet tonne is based on the daily hire rates plus the current cost of bunker oil, at US\$467 per tonne, which is relatively high as compared to historical prices, and related charges.

CRU estimates the shipping cost to fall to approximately US\$45 per wet tonne of concentrate between 2012 and 2016.

SILVER

Introduction to Silver

Silver is usually found in its native form, as an alloy with other metals and in minerals such as argentite and chlorargyrite. It is soft, white, lustrous, malleable and ductile. It has the highest optical reflectivity and the highest thermal and electrical conductivity of all metals. Silver is valued as a precious metal and serves as an important investment tool. In addition, it is applied in various industrial applications, including the production of mirrors, electronics, photography, musical instruments and clothing.

A large amount of silver is found in copper, gold, lead and zinc ores and produced as a by-product of the refining process of these base metals. Due to its high value, the extraction of silver can be commercially viable even at very low concentrations in ores or concentrates. Silver is also readily recyclable from sources such as photographic developing solutions and industrial catalysts.

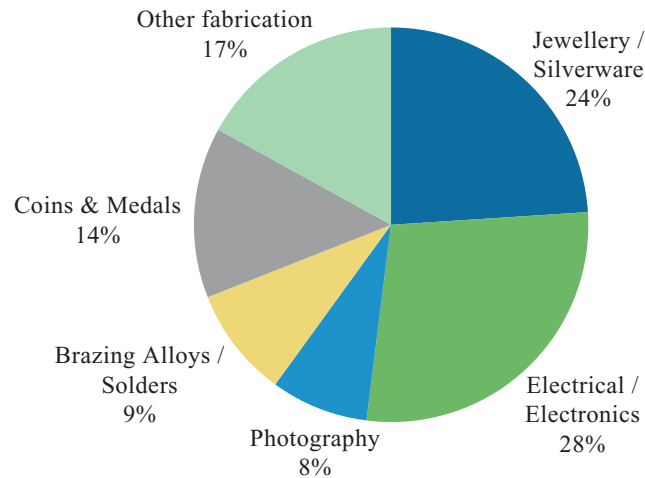
Demand for Silver

Demand for silver comes from fabrication and investment. According to CRU, fabrication demand accounts for 90% to 95% of total global silver demand. Such demand is mainly from the

INDUSTRY OVERVIEW

electrical, electronics, ornament and jewelry industries. Investment demand for silver from investors and banks is largely determined by the commodity trading price of silver. Set forth below is a breakdown of global fabrication demand for silver in 2011 by end-use sectors:

Breakdown of Global Silver End Use in 2011



Source: CRU

From 2006 to 2008, global demand for silver increased at a modest rate of between 0.3% and 1.6% per annum. In 2009, global fabrication demand for silver experienced a significant decrease of 10.6% as a result of the global financial crisis. However, demand for silver increased by 13.3% in 2010, returning to the pre-crisis level. In 2011, as a result of the global economic conditions, demand for silver decreased by 1.4%.

CRU expects global silver consumption to grow at a CAGR of 2.5% from 2012 to 2016, primarily driven by growth in demand for uses in both brazing alloys and solders and electrical and electronics applications.

Supply of Silver

The majority of silver is produced as a by-product from the production of other base metals. The largest suppliers of silver to the global market are located in South American countries, in particular, Peru and Chile, where large-scale domestic base metal operations exist and produce silver as a by-product, followed by those located in North America, primarily in Mexico, and Asia. In 2011, the volume of silver supplied by Peru and China were 3,414 and 3,250 tonnes, accounting for 14.0% and 13.3% of the total global supply, respectively.

From 2006 to 2011, the global supply of silver increased at a CAGR of 3.2%, primarily due to increased silver production in North America and South and Central America. CRU expects global silver production to reach 27,075 tonnes per annum by 2016, including production from mining projects that are scheduled to commence production by 2016, representing a CAGR of 2.0% from 2012 to 2016.

Market Balance of Silver

The global silver market has experienced a surplus since 2006, which peaked in 2009 due to a decrease in demand which was in turn due to the financial crisis. The surplus further increased in 2011. CRU estimates that a surplus will continue to exist through 2016.

Silver can also be derived from scrap sources, with the largest amount being recovered from the photographic, catalytic and electronic sectors. Excluding photographic scrap sources, the total supply of silver from scrap sources has consistently increased every year since 2006 as it became more economical to process silver from scrap sources due to increased silver prices. Apart from slight annual fluctuations, total global silver supply from recycled scrap sources is not expected to fall significantly through 2016, according to CRU.

Silver Pricing

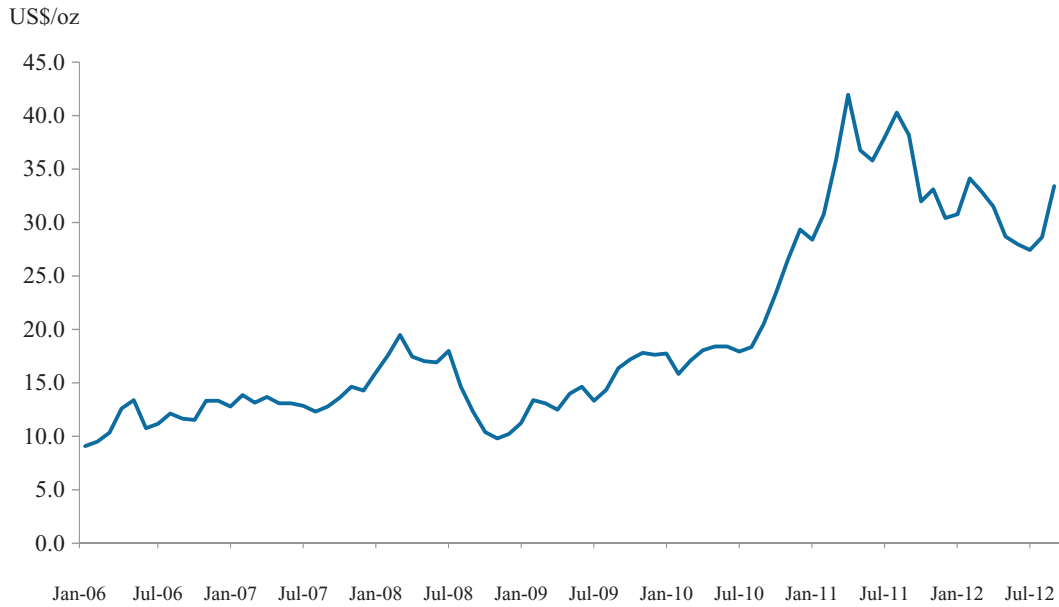
The major trading markets for silver include the LBMA based in London, and the COMEX based in New York. Both bullion and industrial-grade refined silver are traded at a standard 99.99% silver content as defined by the LBMA. Silver prices at the LBMA are fixed daily at 12:00 noon GMT by members of London Silver Fixing Ltd. The price of industrial-grade silver is based on either the LBMA price or the price published by Handy & Harman, one of the largest suppliers of industrial silver in the world. The spot price for silver is determined by prevailing levels at the COMEX.

With the exception of 2009, when it fell slightly by 2.1%, the price of silver has been increasing since 2006, with the steepest increase occurring in April 2011. These increases have been driven by strong investment whilst fabrication demand fell slightly. Silver prices remained relatively high throughout 2011 and decreased slightly in the first half of 2012. CRU expects silver prices to fall slightly to around US\$30 per ounce by the end of 2012. CRU further estimates that silver prices will remain relatively stable from 2013 to 2015 and decrease significantly in 2016.

INDUSTRY OVERVIEW

Set forth below is the historical price of silver from January 2006 to July 2012.

Historical Silver Price, January 2006 to July 2012



Source: CRU

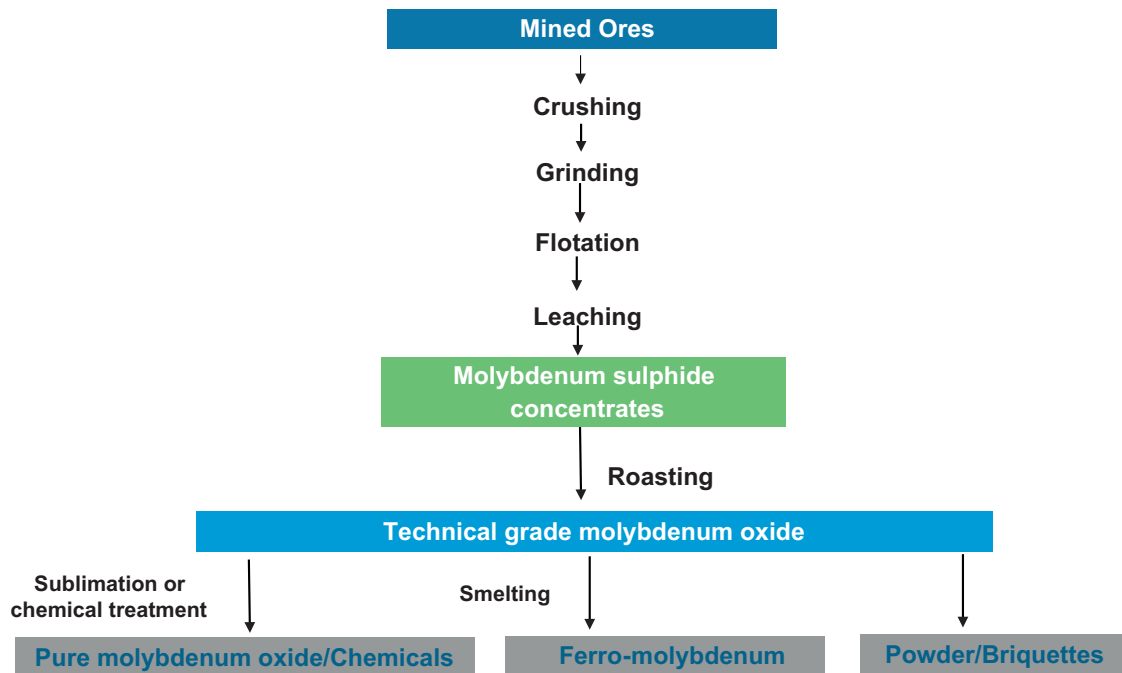
MOLYBDENUM

Molybdenum is a ductile metal with an exceptionally high melting point of 2,623°C and is used principally as an alloying agent in steel, catalysts, fabricated metal and non-ferrous alloys to enhance hardness, high temperature strength, toughness and resistance to wear and corrosion.

INDUSTRY OVERVIEW

Molybdenum may be produced from primary mines or by-product mines. In mines where molybdenum is the primary product, it is normally recovered in the form of sulphide concentrate which is despatched to roasters to be turned into molybdenum oxide. In mines where molybdenum is a by-product, molybdenum ores are first leached to reduce the copper content of the concentrate to acceptable levels before they are sent for hydrometallurgical processing to produce ferromolybdenum, ammonium molybdate or molybdenum metal. The chart set forth below illustrates the primary production processes of molybdenum:

Primary Production Process of Molybdenum



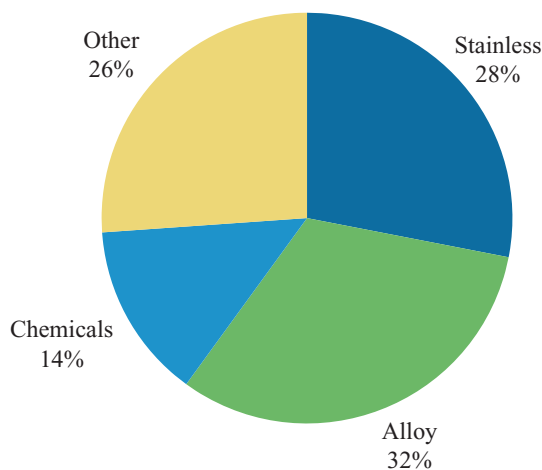
Source: CRU

Most molybdenum is consumed in the form of technical grade molybdenum oxide or one of its downstream derivatives, such as ferromolybdenum or chemical grade oxide. Technical grade molybdenum oxide is produced mainly from molybdenum sulphide concentrates. Of the 573 million pounds of contained molybdenum recovered in 2011 globally, 563 million pounds, or 98%, came from concentrates roasted into molybdenum trioxide. The balance was recycled from spent catalysts.

INDUSTRY OVERVIEW

In 2011, the total global market for primary molybdenum amounted to 511 million pounds. The steel industry was the largest consumer of molybdenum. Stainless and other alloy steel producers consumed approximately 60% of the world's total consumption of molybdenum. The chemical industry was the third largest consumer of molybdenum. The balance was made up, in close to equal volumes, by use in superalloys and metal fabricated products and by foundries. Set forth below is a breakdown of global molybdenum demand in 2011 by end-use sectors:

Breakdown of Global Molybdenum End Use in 2011



Source: CRU

Demand for Molybdenum

According to CRU, global demand for molybdenum in 2007 reached 471 million pounds. However, it experienced a marginal decrease in 2008 and a significant decrease in 2009, to 439 million pounds as a result of the global financial crisis. In 2010, such demand rebounded to a new high of 492 million pounds and further increased to 511 million pounds in 2011.

China surpassed the United States and Western Europe in terms of molybdenum consumption in 2007 and 2009, respectively. Molybdenum consumption in China grew at a CAGR of 25.2% from 2006 to 2011. In 2011, consumption of molybdenum in China amounted to 172 million pounds, accounting for 33.7% of the world's total molybdenum consumption. This was mainly driven by the growth of steelmaking in China, which has become the world's largest stainless and alloy steel producer.

According to CRU, growth in global demand for molybdenum is expected to remain stable in 2012, while the growth in demand for molybdenum in China is expected to outpace the growth in global demand from 2012 to 2016, as a result of expected growth in China's steel industry.

Supply of Molybdenum

Molybdenum concentrates are derived from two main sources: primary molybdenum mines and by-product or co-product mines, mostly copper mines. Chile, Peru and Mexico are among the main

INDUSTRY OVERVIEW

producers of by-product or co-product molybdenum concentrates. In 2011, Peru produced 41.4 million pounds of by-product or co-product molybdenum concentrates, representing 14.9% of the world's total by-product or co-product molybdenum supply. China is the largest producer of primary molybdenum concentrates in the world, followed by other significant sources, including Russia and Armenia.

The distinction between primary and by-product mines is important in forecasting future production of molybdenum. The production of by-product molybdenum is relatively insensitive to molybdenum prices. Existing copper mines may continue to recover molybdenum as long as it remains profitable to continue producing copper. Molybdenum values may, at the margin, influence whether a new copper mine will start extracting and processing molybdenum, but they are not normally an overriding factor. Decisions about mining primary molybdenum deposits are much more price-sensitive. The decision to build a primary mine or to re-open a closed primary mine will depend critically on projections of the price of molybdenum over the life of the project. Even the production levels at operating primary mines may depend on molybdenum prices.

According to CRU, the production of molybdenum concentrates is expected to increase to 931 million pounds in 2016 from 573 million pounds in 2011, primarily due to production from by-product mines. The largest new by-product production is expected to come from Peru, followed by the United States and Chile. It is estimated that supply from China will not change significantly, amounting to no more than 7 million pounds per year, mainly from small-scale mines.

Market Balance of Molybdenum

According to CRU, oversupply of molybdenum began in 2008 and is expected to continue through 2016, and the growth in supply will continue to outpace the growth in demand.

Molybdenum Pricing

The LME began trading molybdenum futures in February 2010, providing a clear and transparent pricing point for molybdenum producers and permitting those producers and others to engage in hedging activities. As in line with LME contracts, all prices are set in US\$/tonne; but, in the case of molybdenum, the price is per tonne of contained metal as the actual traded product is a 57% to 63% concentrate. Molybdenum concentrate, molybdenum oxide and ferromolybdenum are sold, largely on a spot basis, by traders and dealers worldwide.

INDUSTRY OVERVIEW

European molybdenum oxide prices are key measures of molybdenum's market price and are widely used and commonly quoted within the molybdenum industry and by industry specialists, commodity and equity analysts as a benchmark of molybdenum's market price. Set forth below is the historical European spot price for technical grade molybdenum oxide from January 2006 to July 2012.

Historical European Spot Price for Technical Grade Molybdenum Oxide, January 2006 to July 2012



Source: CRU

Based on the analysis of the historic price of molybdenum, CRU estimates that the price of molybdenum will slightly decrease throughout 2013 as the market surplus grows, and will begin to increase slightly as the growth in surplus will be offset by the growth in consumption of molybdenum in the production of stainless steel starting in 2013.