PRESENTATION

To facilitate investors to gain a better understanding of the operations and industry position of China Molybdenum Co., Ltd.* (the “Company”), analysis and prospects of the industry and market in which the Company operates, acquisition of an interest in Northparkes joint venture and the outlook of the copper industry, etc., the Company has prepared a presentation (appended to this announcement and is available for download at www.chinamoly.com).

The presentation contains certain information which has been derived from official, market and other sources including Wood Mackenzie and public company filings. The directors of the Company (the “Directors”) believe that the sources of such information are appropriate sources for the information. The Directors have exercised reasonable care in selecting and identifying the relevant information sources and in compiling, extracting and reproducing such information, and 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. This information has not been independently verified by the Directors or any of the Directors’ affiliates or advisers or any of their affiliates or advisers and no representation is given by the above parties as to its accuracy.
Luoyang City, Henan Province, People’s Republic of China, 11 November 2013

As at the date of this announcement, the Company’s executive Directors are Mr. Wu Wenjun, Mr. Li Chaochun, Mr. Li Faben, Mr. Wang Qinxi and Ms. Gu Meifeng; the non-executive Director is Mr. Zhang Yufeng; and the independent non-executive Directors are Messrs. Bai Yanchun, Xu Shan, Cheng Gordon and Xu Xu.

* for identification purposes only
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These materials should be read in conjunction with CMOC’s unaudited consolidated financial statements for the nine months ended 31 September 2013 and other public disclosures.

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Part 1

Investment Highlights
China Molybdenum investment highlights

✓ A leading moly producer and the second largest tungsten concentrate producer in the world, now with substantial exposure to copper and gold
✓ High quality, long-life and low-cost portfolio
✓ Strong cash flow generation with flexible funding structure
✓ Two world-class moly projects, and significant upside at Northparkes that support future expansion and sustainable growth
✓ Northparkes and its experienced management team provide a strong platform for international growth
✓ Commitment to disciplined acquisitions and prudent capital allocation to drive shareholder returns
✓ Commitment to industry-leading HSE practices
Part 2

Update on CMOC
High quality and diversified portfolio

High quality and diversified asset portfolio across four commodities, all with strong leverage to China and emerging economies

- **Sandaozhuang Mine**
  - Molybdenum / Tungsten
  - Location: Henan Province, China

- **Shangfanggou Mine**
  - Molybdenum / Iron
  - Location: Henan Province, China

- **East Gobi Project**
  - Molybdenum
  - Location: Xinjiang, China

- **Luoning Mines**
  - Silver / Gold
  - Location: Henan Province, China

- **Northparkes**
  - Copper / Gold
  - Location: Sydney, Australia

**2012 pro forma revenue by commodity**

- **Moly** 33%
- **Copper / gold** from Northparkes 45%
- **Tungsten** 23%
- **Gold / silver** 5%
- **Other** 3%
- **Lead** 7%
- **Other** 6%

**2012 pro forma gross profit by commodity**

- **Moly** 24%
- **Copper / gold** (from Northparkes) 45%
- **Tungsten** 23%
- **Gold / silver** 12%
- **Other** 3%
- **Lead** 7%
- **Other** 6%

(1) Pro forma for Northparkes acquisition.
CMOC is a leading molybdenum and tungsten producer in China and globally

### Molybdenum

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>2012 Production (Moly, kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Freeport</td>
<td>38.6</td>
</tr>
<tr>
<td>2</td>
<td>Codelco</td>
<td>19.6</td>
</tr>
<tr>
<td>3</td>
<td>Group Mexico</td>
<td>18.2</td>
</tr>
<tr>
<td>4</td>
<td>JDC</td>
<td>17.0</td>
</tr>
<tr>
<td>5</td>
<td>CMOC</td>
<td>15.3</td>
</tr>
</tbody>
</table>

### Tungsten

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>2012 Production (65% WO$_3$, kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jiangxi Tungsten Industry Group Co., Ltd</td>
<td>~13.0</td>
</tr>
<tr>
<td>2</td>
<td>CMOC$^{(1)}$</td>
<td>11.1</td>
</tr>
<tr>
<td>3</td>
<td>Hunan Shizhuyuan</td>
<td>5.3</td>
</tr>
<tr>
<td>4</td>
<td>Xiamen Tungsten$^{(1)}$</td>
<td>4.7</td>
</tr>
<tr>
<td>5</td>
<td>Zhangyuan Tungsten</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Source: International Molybdenum Association (IMOA), company filings, Shenyin & Wanguo Securities research report

$^{(1)}$ Tungsten concentrate (65% WO$_3$); includes 50% interest in Yulu (CMOC JV with Xiamen Tungsten).
CMOC has the world’s largest indicated moly resource base with significantly lower cash cost than its peers.

Unit cost of moly in 2012 (RMB ’0,000 / ton)

- CMOC: 11.5, 9.6
- JDC: 13.7, N/A

Cash cost of moly oxide (US$/lb)\(^5\)

- CMOC: 6.5, 5.6
- JDC: 1.2
- Thomson Creek 2012: 10.1
- Climax 2012: 6.3

Total resources compared to peers (0’000 tons)

- CMOC: 181
- JDC: 146
- Thomson Creek: 55
- Climax: 51

- Unit COGS materially lower than primary competitors’
- Cash cost of moly oxide one of the lowest in the world
- Cost of moly significantly reduced by tungsten credits
- The world’s largest indicated moly resource

\(^{(1)}\) Figures are YTD; \(^{(2)}\) Calculated as total operating costs of molybdenum concentrate and deeply processed molybdenum products of current period / sales of current period (calculated by metal content); \(^{(3)}\) Assume 100% basis for Shangfanggou and East Gobi; \(^{(4)}\) Reserves only as per SEC reporting rules; \(^{(5)}\) Excludes resource tax, D&A, SG&A and other subsidiaries; \(^{(6)}\) Deducts the operating income generated by tungsten.
High-growth, low-cost tungsten producer

**In the last three years, CMOC has realised improvements in production, ore grade and recoveries, resulting in declining unit costs and improved margins**

**Strong production growth**
- Tungsten production (0,000 tons metals)
  - CAGR: 29%
  - 2010: 0.33, 2011: 0.47, 2012: 0.55, 2013Q3: 0.52

**Increasing average grade**
- Average feed grade (%)
  - 2010: 0.064%, 2011: 0.065%, 2012: 0.078%, 2013Q3: 0.090%

**Improving recovery rates**
- Recovery rate of tungsten concentrate (%)
  - 2010: 63.70%, 2011: 72.07%, 2012: 77.90%, 2013Q3: 78.33%

**Declining unit costs**
- Unit cost of tungsten concentrate (RMB ‘0,000 / ton of concentrate)
  - 2010: 3.89, 2011: 3.64, 2012: 2.87, 2013Q3: 2.34

**Industry leading gross margins**
- Gross margin (%)
  - 2010: 60.4%, 2011: 75.7%, 2012: 79.9%, 2013Q3: 82.9%

(1) Data according to CMOC’s consolidated financials, excludes Yulu joint venture figures.
(2) Figures are YTD.
Strong financial performance in 2013 YTD

In spite of a ~6% decline in the molybdenum price during the year, financial performance during the first 3 quarters of 2013 has improved from the same period last year due to significant cost improvements.

Significantly improved net profit\(^{(1)}\)

Excluding the impact from Yongling Gold and Lead Refinery losses (outlined by dashed line), the company has maintained strong net profits\(^{(2)}\)

<table>
<thead>
<tr>
<th>RMB in’00mm</th>
<th>2012Q3</th>
<th>2013Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.51</td>
<td>10.83</td>
<td></td>
</tr>
</tbody>
</table>

Price of moly oxide (>51%)

<table>
<thead>
<tr>
<th>RMB/mtu</th>
<th>2012/07/04</th>
<th>2013/01/04</th>
<th>2013/07/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000</td>
<td>2,500</td>
<td>2,000</td>
<td></td>
</tr>
</tbody>
</table>

Strong operating cash flows\(^{(1)}\)

<table>
<thead>
<tr>
<th>RMB in’00mm</th>
<th>2012Q3</th>
<th>2013Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.93</td>
<td>11.00</td>
<td></td>
</tr>
</tbody>
</table>

Price of tungsten concentrate (65%)

<table>
<thead>
<tr>
<th>RMB/mtu</th>
<th>2012/01/04</th>
<th>2012/07/04</th>
<th>2013/01/04</th>
<th>2013/07/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Expenses have significantly declined\(^{(1)}\)

<table>
<thead>
<tr>
<th>Selling</th>
<th>Finance</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.18</td>
<td>0.48</td>
<td>3.15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Selling</th>
<th>Finance</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.14</td>
<td>0.21</td>
<td>2.60</td>
</tr>
</tbody>
</table>

(1) Figures are YTD.

(2) CMOC is divesting Yongling Gold and Lead Refinery assets in order to improve asset structure, enhance operational performance and increase profitability. Currently using all efforts to progress workflows.
Part 3

Northparkes Acquisition
## Northparkes: Key terms of acquisition

| **Transaction** | CMOC Mining Pty Ltd acquiring Rio Tinto’s 80% interest in Northparkes, related rights and assets  
| CMOC Mining Pty Ltd will be appointed as manager to manage the day to day operations of Northparkes in accordance with the Northparkes Management Agreement |
| **Purchase price** | US$820 million (RMB5,032m\(^{(1)}\)) in cash, subject to customary adjustments |
| **Conditions** | Shareholder approval required  
| Two major shareholders (69% of total register) committed to vote in favor of the transaction |
| **Transition** | Majority of Northparkes employees to become CMOC employees  
| Rio Tinto to provide transitional services for up to 12 months post close |
| **Timetable** | Transaction expected to close before the end of 2013 |

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\(^{(1)}\) Converted at USDRMB exchange rate of 6.1372 on 29 July 2013 (date of transaction announcement).
Northparkes: Transaction rationale

Northparkes is a strong fit for CMOC

✔ High-quality, long-life asset with a low-cash cost position
✔ Meaningful exposure to highly attractive long-term copper fundamentals
✔ Australia is a low-risk and mining-friendly jurisdiction
✔ Potential to further improve operational efficiency
✔ Potential for expanded capacity or mine life, based on large defined resources and further exploration upside
✔ Provides additional technical expertise (e.g. block caving)
✔ Provides strong platform for future international growth
✔ Immediately value-accrative to CMOC shareholders
Northparkes: Asset overview

- 27km northwest of the town of Parkes in Central New South Wales and 350km north west of Sydney
- Incoming joint venture between CMOC (80%)\(^{(1)}\), Sumitomo Metal Mining Oceania Pty Ltd. (13.3%) and SC Mineral Resources Pty Ltd. (6.7%)
- 19 years of successful operations including two open pit mines and three block cave mines
- Top four copper producing mine in Australia in 2012
  - Copper concentrate production of 54kt
  - Low net C1 cash cost less than US$1/lb Cu
- Industry-leading block caving technology, experienced management team and best practice in HSE
- Highly efficient operations with 40% of mining operations automated
- Well-established mining infrastructure and excellent relationships with the local government and communities

### Key Statistics

<table>
<thead>
<tr>
<th>Total JORC resources(^{(2)(3)})</th>
<th>471.7Mt @ 0.70% Cu-Eq(^{(4)}); 2,668kt Cu and 2,554koz Au</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total JORC reserves(^{(2)})</td>
<td>107.5Mt @ 0.81% Cu-Eq(^{(4)}); 667kt Cu and 1,002koz Au</td>
</tr>
<tr>
<td>First production</td>
<td>1993</td>
</tr>
<tr>
<td>Existing mine life, based on reserves</td>
<td>17 years</td>
</tr>
<tr>
<td>Potential extended mine life, based on resources</td>
<td>+30 years</td>
</tr>
</tbody>
</table>

\(^{(1)}\) CMOC to acquire its interest in Northparkes from Rio Tinto upon completion which is expected in 2013. \(^{(2)}\) 100% basis. \(^{(3)}\) Resources are exclusive of reserves; \(^{(4)}\) Copper equivalent grade. Assumes long term copper price of US$3.15/lb and long term gold price of US$1,400/oz.
Northparkes: Large-scale high-quality asset

Northparkes produced 54kt of copper in concentrate in 2012, and represents the fourth largest copper mine in Australia

<table>
<thead>
<tr>
<th>Year</th>
<th>Historical Copper Production (kt)</th>
<th>Historical Gold Production (koz)</th>
<th>EBITDA (A$m)</th>
<th>EBITDA Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>39</td>
<td>65</td>
<td>210</td>
<td>62%</td>
</tr>
<tr>
<td>2011</td>
<td>50</td>
<td>76</td>
<td>203</td>
<td>52%</td>
</tr>
<tr>
<td>2012</td>
<td>54</td>
<td>72</td>
<td>238</td>
<td>54%</td>
</tr>
<tr>
<td>1H2013</td>
<td>29</td>
<td>38</td>
<td>111</td>
<td>61%</td>
</tr>
</tbody>
</table>

Improved margins due to cost cutting initiatives
Northparkes is a low cost operation, benefiting from the highly efficient block cave mining method and valuable gold and silver by-products, with a C1 cash cost in the lowest quartile of the cost curve.

2012 copper C1 cash cost curve\(^{(1)}\)

(US$/lb payable Cu)


(1) C1 cash cost represents the cost incurred at each processing stage from mining to recoverable metal delivered to market, less net by-products (if any).
Northparkes: Successful operating history

- Northparkes operates from approximately 2,480 hectares of Mining Leases
  - 1,630 hectares used for mining operations
  - Operations surrounded by 6,144 hectares of Northparkes owned land used for farming

- Past mines:
  - E22 & E27 open pits
  - E26 deposit – Lift 1 / Lift 2 / Lift 2N

- Current and future mines:
  - Currently mining: E48 block cave Lift 1
  - Planned future mines: E22 block cave Lift 1
  - Potential mines: E48 block cave Lift 2; E26 block cave Lift 3; GRP314 block cave
Northparkes: Exploration upside

Despite the long history of exploration, there is significant potential to define further mineralised bodies within the Northparkes project area

- Ore Reserves of approximately 108Mt that support a forecast mine life of 17 years
- 472Mt Measured & Indicated Resources are directly beneath the Ore Reserves
  - Significant upside potential to support expanded capacity or expanded mine life
  - Based on current mining capacity, resources could support a mine life in excess of 30 years
- Drilling below currently defined resources has intersected extensions of the host porphyry bodies

Cross section illustrating the identified resource potential
Potential exists to mine additional defined resources using existing mining infrastructure to extend
mine life or increase production rates.

E26 looking west

E48 looking east
The implied enterprise value to resources multiple of the Northparkes acquisition is below the average of relevant precedent transactions

<table>
<thead>
<tr>
<th>Acquirer</th>
<th>Target</th>
<th>Transaction date</th>
<th>Size (USD million)</th>
<th>Cu-eq. Resources (billion lbs)</th>
<th>EV / Cu-eq. Resources (USD/lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minmetals</td>
<td>OZ Minerals (mining assets)</td>
<td>Apr 2009</td>
<td>$1,354</td>
<td>34.2</td>
<td>$0.04</td>
</tr>
<tr>
<td>Jinchuan</td>
<td>Metorex</td>
<td>Jul 2011</td>
<td>$1,414</td>
<td>11.3</td>
<td>$0.13</td>
</tr>
<tr>
<td>Barrick</td>
<td>Equinox</td>
<td>Apr 2011</td>
<td>$7,824</td>
<td>17.7</td>
<td>$0.44</td>
</tr>
<tr>
<td>Minmetals</td>
<td>Anvil</td>
<td>Sep 2011</td>
<td>$1,260</td>
<td>3.7</td>
<td>$0.34</td>
</tr>
<tr>
<td>KGHM</td>
<td>QuadraFNX</td>
<td>Dec 2011</td>
<td>$2,316</td>
<td>30.0</td>
<td>$0.08</td>
</tr>
<tr>
<td>First Quantum</td>
<td>Inmet</td>
<td>Dec 2012</td>
<td>$3,492</td>
<td>54.7</td>
<td>$0.06</td>
</tr>
<tr>
<td>Capstone</td>
<td>Pinto Valley</td>
<td>Apr 2013</td>
<td>$650</td>
<td>8.8</td>
<td>$0.07</td>
</tr>
<tr>
<td>Chinese &amp; South African Consortium</td>
<td>Palabora (57.7%)</td>
<td>Dec 2012</td>
<td>$373</td>
<td>4.4 (57.7% basis)</td>
<td>$0.04</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$0.15</td>
</tr>
<tr>
<td>CMOOC</td>
<td>Northparkes</td>
<td>July 2013(1)</td>
<td>$820</td>
<td>5.8 (80.0% basis)</td>
<td>$0.14</td>
</tr>
</tbody>
</table>

(1) Date of agreement signing.
Part 4

Copper Outlook
Highly attractive long-term fundamentals

Northparkes provides substantial portfolio exposure to highly attractive long-term copper fundamentals

- Undersupply of copper expected from 2017 due to a lack of projects in pipeline from the following:
  - Capital cost escalation of new projects
  - Declining copper grades
  - Projects in higher risk jurisdictions
  - Permitting issues
  - Availability of power and water
  - Mining companies deferring spending

New mine supply from probable and possible projects versus primary demand


Potential deficit exceeds 10 million tonnes of copper
Copper demand

Copper demand is underpinned by strong demand from BRIC nations. Global demand growth is expected to average 2.6% from 2012 to 2030.

Indexed Copper Consumption Growth (2005=100)

BRICs nations Copper Consumption Growth

<table>
<thead>
<tr>
<th>Country</th>
<th>2012 – 2030 refined copper consumption CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>6.4%</td>
</tr>
<tr>
<td>China</td>
<td>4.0%</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.4%</td>
</tr>
<tr>
<td>Russia</td>
<td>1.9%</td>
</tr>
<tr>
<td>Global</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Copper supply: Declining head grades

Head grades will continue to decline, forcing cash costs to increase and supporting prices

- Average head grade in 2012 was 1.07%
  - Average grade in 1980 was 1.57% Cu in 1980 (32% decline)
  - Average head grade predicted for 2025 is 0.86%
- Lower head grades increases mining and processing costs
- As the marginal cost of production increases, the copper price required to incentivize project development in the future will be higher than it is today

Escalating capital costs and subsequent declining returns have resulted in project delays and cancellations

- Annual capex escalation has been above 10% since 2004
- As a result, expected returns from new projects has declined and projects have been cancelled or delayed
- The project pipeline is becoming squeezed, resulting in a projected decline in copper production from 2017 onwards

Capex escalation 2004 – 2013

While there are a number of large scale copper mine projects, the majority of these are in high risk jurisdictions with key issues impacting their development.

Key issues:
- Availability of power and water
- Permitting
- Social issues
- Export infrastructure (e.g. ports, roads, rail)
- Royalty regimes
- Capital cost

Potential contribution from highly probable, probable and possible projects by 2023:

- Chile 23%
- Peru 13%
- Other Latin America 11%
- Phillipines 4%
- Mongolia 3%
- Other Asia 7%
- DRC 5%
- Russia and the Caspian 4%
- North America 15%
- Europe 1%
- Middle East 2%
- PNG & Fiji 4%
- Other Africa 3%
- Australia 5%
- North America 15%
- Australia 5%
- Russia and the Caspian 4%
- Chile 23%
- Peru 13%
- Other Latin America 11%
- Phillipines 4%
- Mongolia 3%
- Other Asia 7%
- DRC 5%
- Russia and the Caspian 4%
- North America 15%
- Australia 5%
- Peru 13%
- Other Latin America 11%
- Phillipines 4%
- Mongolia 3%
- Other Asia 7%
- DRC 5%
- Russia and the Caspian 4%

Unapproved projects\(^{(1)}\) require an average copper price of US$3.67/lb to generate an IRR of 12%. There are many projects which require a higher copper price to achieve a 12% IRR.

- Wood Mackenzie forecasts a requirement of greater than 6.0Mt of new mine production by 2023.
- At the Wood Mackenzie forecast long term price of US$3.50/lb, only an additional 3.9Mt from these projects will achieve a 12% IRR.
- At a long term copper price of US$4.50/lb, 6.0Mt will achieve a 12% IRR.

\(^{(1)}\) Includes probable and possible projects as defined by Wood Mackenzie.
The copper price has remained well above the 90th percentile of the cost curve in the last 10 years.

Copper price outlook

$3.75-$4.00/lb
Short and medium-term corrections to demand especially if deficit is expected to be prolonged

$3.50/lb
Incentive price required to prevent market falling into structural deficit

~$3.00/lb
Strategic buyers see value versus all-in cash costs and future greenfield needs

$2.80-$3.00/lb
90th percentile total cash costs + sustaining capex

Woodmac LT price forecast

Mines depleting, projects difficult to build and fund

Strategic buyers and traders, disruptions and project issues

Estimated price floor on a year over year basis
Part 5

Convertible Bond
The company has multiple financing options, and it has complied with all A-share and H-share guidelines with respect to shareholder rights, debt-holder rights, and refinancing conditions. In determining the appropriate financing option for the acquisition, the Board considered the following factors:

- Funding costs
- Capital structure
- Availability of financing methods
- Correlation between approval cycles and the relevant business development and acquisition arrangements
- Timing of the transaction
- Funding risk
- Flexibility of potential future funding requirements

The Board carefully considered all the financing alternatives available in determining to proceed with the issuance of the convertible bond.
### Key terms of proposed convertible bond

<table>
<thead>
<tr>
<th><strong>Offering size</strong></th>
<th>• Not more than RMB4.9bn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Offer price</strong></td>
<td>• Nominal value of RMB100</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>• 6 years</td>
</tr>
<tr>
<td><strong>Interest rate</strong></td>
<td>• Not more than 3.0%</td>
</tr>
<tr>
<td></td>
<td>• Interest rate for each year to be determined by the Board, with reference to the PRC government policies, market conditions and actual conditions of the Company</td>
</tr>
<tr>
<td><strong>Conversion timeline</strong></td>
<td>• 6 months after date of issuance to CB maturity</td>
</tr>
<tr>
<td><strong>Conversion price</strong></td>
<td>• Initial conversion price shall not be lower than:</td>
</tr>
<tr>
<td></td>
<td>• The average A-share price for the 20 trading days preceding the date of publication of the offering document; and</td>
</tr>
<tr>
<td></td>
<td>• Average trading price of A Shares on the trading day preceding the date of the offering document</td>
</tr>
<tr>
<td><strong>Redemption at maturity</strong></td>
<td>• Within 5 trading days of CB maturity, the Company will redeem all outstanding CBs at a premium to the par value (including interest accrued in the last interest accrual year)</td>
</tr>
<tr>
<td><strong>Conditional sale back</strong></td>
<td>• From the third interest accrual year, if the closing price of A shares is lower than 70% of the conversion price for 30 consecutive trading days, CB holders have the right to sell back part or all of the CBs to the Company at 103% of par (including interest accrued)</td>
</tr>
</tbody>
</table>
The issue of a convertible bond is the most suitable financing alternative for the Northparkes acquisition

- Low funding cost
- Increases CMOC’s net asset value and improves shareholder value
- Low offering risk
- Improves CMOC’s capital structure
- No immediate dilution
- Actionable in current market
- In line with regulators’ guidance
Part 6

Valuation
Significant upside to CMOC valuation

CMOC’s H share is significantly undervalued relative to its peer group

Price / Forward EPS

- Xinjiang Xinxin: 23.1x
- CITIC Dameng: 22.8x
- Thompson Creek: 13.6x
- Jiangxi Copper: 12.9x
- Zijin Mining: 12.9x
- PanAust: 12.2x
- Sandfire: 11.2x
- MMG: 7.8x
- China Moly: 5.4x

Source: FactSet as of November 4, 2013. China Moly’s H share price is used in the analysis.
(1) CMOC H Share P/E.
CMOC’s vision and strategy

Our objective is to become a leading global base, specialty and precious metals producer

Objectives

1. Continue to be a leader in health and safety
2. Build on our world class position in molybdenum and tungsten
3. Improve production technologies and operational efficiency
4. Actively pursue acquisition opportunities in base, specialty and precious metals
5. Leverage existing customer relationships in the PRC to maximize asset values
China Molybdenum - Summary

- A leading moly producer and second largest tungsten concentrate producer in the world, now with substantial exposure to copper and gold

- The acquisition of Northparkes provides a high quality, large scale producing copper-gold mine, and a platform for international growth

- Strong cash flow generation with flexible funding structure

- Long-term fundamentals of copper are attractive, with new project developments facing a number of challenges

- Outlook for molybdenum and tungsten is strong, with a concentrated supply base and broad industrial applications
Appendix

Molybdenum and Tungsten Outlook
1. Market Analysis and Outlook of the Molybdenum Industry – Industry Profile

Molybdenum is a rare metal, sometimes known as an “energy metal”

Its features include a high melting point, high strength, high elasticity coefficient, corrosion resistance, etc.

Analysis of the Industrial Chain of Molybdenum

- Raw materials are differentiated according to “main-product molybdenum” and “by-product molybdenum”
- I.e. MoO$_3$, known as roasted molybdenum concentrate
- Molybdenum oxide can be used directly as a steel smelting additive
- 45%-51% pure molybdenum content

- 45%-51% pure molybdenum content

- Molybdenum is used as a steel smelting additive for the production of alloy structural steel, stainless steel and other specialized steels
- Metal products
- It can be used to produce highly sophisticated technical products with extremely high added value
- Molybdenum chemical products
- Very broad application scope
1. Market Analysis and Outlook of the Molybdenum Industry – Supply

Characteristics of molybdenum supply: High degree of concentration and relative separation between domestic and foreign markets

Global output and consumption of molybdenum

<table>
<thead>
<tr>
<th>Year</th>
<th>Global Output</th>
<th>Global Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>20.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2007</td>
<td>20.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2008</td>
<td>20.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2009</td>
<td>20.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2010</td>
<td>20.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2011</td>
<td>20.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2012</td>
<td>20.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Output of main global producers (‘0,000 tons)

<table>
<thead>
<tr>
<th>No.</th>
<th>Company</th>
<th>Mineral Type</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>US-based Freeport</td>
<td>Primary + associated copper molybdenum</td>
<td>3.27</td>
<td>3.78</td>
<td>3.86</td>
</tr>
<tr>
<td>2</td>
<td>Chile-based Codelco</td>
<td>Associated copper molybdenum</td>
<td>2.12</td>
<td>2.35</td>
<td>1.96</td>
</tr>
<tr>
<td>3</td>
<td>Group Mexico</td>
<td>Associated copper molybdenum</td>
<td>2.05</td>
<td>1.86</td>
<td>1.82</td>
</tr>
<tr>
<td>4</td>
<td>Jinduicheng Molybdenum</td>
<td>Primary</td>
<td>1.40</td>
<td>1.29</td>
<td>1.70</td>
</tr>
<tr>
<td>5</td>
<td>China Molybdenum</td>
<td>Primary</td>
<td>1.50</td>
<td>1.55</td>
<td>1.53</td>
</tr>
<tr>
<td>6</td>
<td>Chile-based Antofagasta</td>
<td>Associated copper molybdenum</td>
<td>0.91</td>
<td>0.99</td>
<td>1.22</td>
</tr>
<tr>
<td>7</td>
<td>Canada-based Thompson Creek</td>
<td>Primary</td>
<td>1.41</td>
<td>1.33</td>
<td>1.02</td>
</tr>
<tr>
<td>8</td>
<td>Rio Tinto Kennecott</td>
<td>Associated copper molybdenum</td>
<td>1.17</td>
<td>1.39</td>
<td>0.94</td>
</tr>
<tr>
<td>9</td>
<td>Peru-based Antamina under BHP</td>
<td>Associated copper molybdenum</td>
<td>0.28</td>
<td>0.62</td>
<td>0.55</td>
</tr>
<tr>
<td>10</td>
<td>Chile-based Collahuasi under Xstrata</td>
<td>Associated copper molybdenum</td>
<td>0.82</td>
<td>0.67</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>14.93</td>
<td>15.83</td>
<td>14.80</td>
</tr>
<tr>
<td></td>
<td>Total global output</td>
<td></td>
<td>22.5</td>
<td>24.2</td>
<td>24.0</td>
</tr>
<tr>
<td></td>
<td>Ratio of leading manufacturers</td>
<td></td>
<td>66.36%</td>
<td>65.41%</td>
<td>61.67%</td>
</tr>
</tbody>
</table>

Source: IMOA, ATK, and the Company’s annual report.
1. Market Analysis and Outlook of the Molybdenum Industry – Supply (Cont’d)

There has been a slight oversupply in the Chinese market over the past few years, and the inversion of costs has constrained supply growth.

**Molybdenum production and consumption in China**

- **Production**
- **Consumption**
- **Supply-demand difference (excluding export)**

**Molybdenum import and export volume in China:** basically flat

- **Import**
- **Export**
- **Net export**

**Where are the excess inventories?**

- Observations of peers indicate low inventory levels across major molybdenum concentrate producers.
- Cold weather from late 2012 to early 2013 affected supplies of molybdenum concentrate, causing a strong rally of molybdenum concentrate price.
  - Reflects low inventories of downstream iron and steel plants.
- Recent weak moly prices suggest metal traders also are unlikely to hold large volumes of inventory.
- Current market supply and demand data may not reflect the real market condition:
  - Based on observations of the last few years, market supply and demand are largely balanced.

Source: Company reports, China Nonferrous Metals Industry Association, IMOA, Antaike and company research reports. (1) 2006-2011 data provided in China Molybdenum prospectus. 2012 data provided by IMOA. In 2012, China had a molybdenum net export volume of 7.2kt and the actual supply surplus was 3.8kt (94kt production less 83kt consumption less 7.2kt net exports.)
1. Market Analysis and Outlook of the Molybdenum Industry – Supply (Cont’d)

China Moly is at the bottom of the molybdenum cost curve, as a result of its high quality, low cost assets.

Production cost of China Molybdenum: less than 1300 yuan / ton degree

Average price since 2009: 1864 yuan / ton degree

Average production cost of mining enterprise: 1800 yuan / ton degree

Current price: ~1500 yuan / ton degree

Source: Company reports, China Nonferrous Metals Industry Association, IMOA, Antaike and research reports.
1. Market Analysis and Outlook of the Molybdenum Industry – Demand

Specialized steel industry: Exploring new areas for molybdenum demand with “increased proportion of special steel + high-end special steel varieties”

- High-quality specialized steel, specialized alloy materials, military-support materials will be strategic, emerging industries aggressively developed by the special steel industry
- According to preliminary estimates, if China’s ratio of molybdenum steel reaches half the level of Japan, the annual increase in molybdenum demand will reach about 22,000 tons, accounting for 20% of annual output

<table>
<thead>
<tr>
<th>Steel type</th>
<th>Molybdenum content</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-speed steel</td>
<td>4%~9.5%</td>
<td>Manufacturing of high-speed cutting tools and military appliances</td>
</tr>
<tr>
<td>Stainless steel</td>
<td>4%~5%</td>
<td>Sophisticated chemical appliances and equipment used in marine environment</td>
</tr>
<tr>
<td>Alloy steel</td>
<td>3%~4%</td>
<td>Transport equipment, locomotives and construction machinery</td>
</tr>
<tr>
<td>Molybdenum, nickel, and chromium alloy</td>
<td>0.6%~2%</td>
<td>Metal components and corrosion-resistant parts in aircraft</td>
</tr>
<tr>
<td>High-strength steel containing molybdenum</td>
<td>0.015%-0.6%</td>
<td>Oil pipelines and aircraft carrier runways</td>
</tr>
<tr>
<td>High-quality carbon steel</td>
<td>0.2%~0.4%</td>
<td>Sheets, wires, pipes and bars</td>
</tr>
</tbody>
</table>

Large gap between China developed economies in molybdenum steel

<table>
<thead>
<tr>
<th>Country</th>
<th>Molybdenum Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>0.043%</td>
</tr>
<tr>
<td>West Europe</td>
<td>0.036%</td>
</tr>
<tr>
<td>Japan</td>
<td>0.023%</td>
</tr>
<tr>
<td>China</td>
<td>0.009%</td>
</tr>
</tbody>
</table>

Steady growth in crude steel production

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Steel Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4.19</td>
</tr>
<tr>
<td>2007</td>
<td>4.89</td>
</tr>
<tr>
<td>2008</td>
<td>5.00</td>
</tr>
<tr>
<td>2009</td>
<td>5.68</td>
</tr>
<tr>
<td>2010</td>
<td>6.27</td>
</tr>
<tr>
<td>2011</td>
<td>6.83</td>
</tr>
<tr>
<td>2012</td>
<td>7.17</td>
</tr>
</tbody>
</table>

CAGR: 9%

Source: Wind and research reports.
Nuclear power industry: upgrading and adding new capacity stimulates demand for molybdenum

### Impact of long- and medium-term development plans for nuclear power (2005 to 2020) and impact on the Molybdenum Industry

<table>
<thead>
<tr>
<th>Scale before 2000</th>
<th>Scale of New Construction within 5 Years ('0,000 kilowatts)</th>
<th>Production Scale within 5 Years ('0,000 kilowatts)</th>
<th>Scale carried Over to the Next 5 Years ('0,000 kilowatts)</th>
<th>Scale of Total Nuclear Power Operations at the End of the 5 Years ('0,000 kilowatts)</th>
<th>Increase in Installed Capacity ('0,000 kilowatts)</th>
<th>Consumption of Molybdenum (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Tenth Five-year Plan&quot;</td>
<td>346</td>
<td>468</td>
<td>558</td>
<td>694.8</td>
<td>468</td>
<td>1,076</td>
</tr>
<tr>
<td>&quot;Eleventh Five-year Plan&quot;</td>
<td>1,244</td>
<td>558</td>
<td>1,244</td>
<td>1,252.8</td>
<td>558</td>
<td>1,283</td>
</tr>
<tr>
<td>&quot;Twelfth Five-year Plan&quot;</td>
<td>2,000</td>
<td>1,244</td>
<td>2,000</td>
<td>2,496.8</td>
<td>1,244</td>
<td>2,861</td>
</tr>
<tr>
<td>&quot;Thirteenth Five-year Plan&quot;</td>
<td>1,800</td>
<td>2,000</td>
<td>1,800</td>
<td>4,496.8</td>
<td>2,000</td>
<td>4,600</td>
</tr>
</tbody>
</table>

# 1. Market Analysis and Outlook of the Molybdenum Industry – Demand (Cont’d)

Molybdenum chemicals and molybdenum metal products create new opportunities for development.

<table>
<thead>
<tr>
<th>Ammonium molybdate products</th>
<th>Physical properties</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium dimolybdate</td>
<td>Dissolves in water and alkali</td>
<td>Suitable for the production of pure molybdenum trioxide, molybdenum powder, molybdenum plate manufacturing, molybdenum wires and molybdenum components, and also widely used in the production of petroleum refining and chemical fertilizer catalysts with hydrogenation, desulfurization, etc.</td>
</tr>
<tr>
<td>Ammonium molybdate</td>
<td>Dissolves slightly in water, and dissolves in alkali and ammonia</td>
<td>Used for the production of petroleum refining and chemical fertilizer catalysts for hydrogenation, desulfurization, etc. Used as a catalyst in the petrochemical industry; used for the manufacturing of molybdenum powder, strips, wires, bases, and pieces in the metallurgical industry; used as a pigment, color lake and fabric fire retardant agent; and also used as an important agricultural fertilizer</td>
</tr>
<tr>
<td>Hexaammonium molybdate</td>
<td>Also known as ammonium paramolybdate, with extremely high water-dissolving capacity</td>
<td>As an important reagent to test for phosphorus, it is widely used in petrochemical catalysts, especially the acrylonitrile catalyst, and it is also used in pigment chemicals and trace chemical fertilizers. Few powder metallurgy companies use hexaammonium molybdate as a raw material</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Molybdenum metal products</th>
<th>Rare metal functional materials</th>
<th>Category of molybdenum</th>
<th>Main application fields</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High-purity metals and target materials</td>
<td>High-purity molybdenum and target materials thereof</td>
<td>Microelectronics and the new generation of the information industry</td>
</tr>
<tr>
<td></td>
<td>Deep processing materials with high-tech contents</td>
<td>High-quality molybdenum powder and molybdenum billet</td>
<td>Deep processing materials for high-performance molybdenum</td>
</tr>
<tr>
<td></td>
<td>Molybdenum wire for spraying</td>
<td>Large-size molybdenum plates</td>
<td>Surface spraying of auto parts</td>
</tr>
<tr>
<td></td>
<td>Large-size molybdenum electrodes</td>
<td>Large-size molybdenum electrodes</td>
<td>High-temperature furnaces and nuclear power</td>
</tr>
<tr>
<td></td>
<td>Rare earth molybdenum alloys</td>
<td>Rare earth molybdenum alloys</td>
<td>Glass and rare earth processing</td>
</tr>
<tr>
<td></td>
<td>Molybdenum copper alloys</td>
<td>Molybdenum copper alloys</td>
<td>Electronics</td>
</tr>
<tr>
<td></td>
<td>TZM alloys</td>
<td>TZM alloys</td>
<td>Electric and new energy vehicles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Electronic and high-temperature structural materials</td>
</tr>
</tbody>
</table>
Looking at 2013-14, demand growth will exceed supply growth and a pattern of slight shortage will emerge in the molybdenum industry.

No public disclosure of data on demand in the military industry.

Molybdenum ores directly purchased by engineering machinery enterprises are excluded in the statistics.

### Comparison and forecasts of molybdenum concentrate supply and demand

<table>
<thead>
<tr>
<th>'0,000 tons</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (2)</td>
<td>19.2</td>
<td>21.3</td>
<td>22.8</td>
<td>21.2</td>
<td>22.5</td>
<td>24.2</td>
<td>24.0</td>
<td>25.8</td>
</tr>
<tr>
<td>Consumption (2)</td>
<td>19.8</td>
<td>21.3</td>
<td>21.3</td>
<td>18.6</td>
<td>21.5</td>
<td>24.4</td>
<td>23.6</td>
<td>26.2</td>
</tr>
<tr>
<td>Supply and demand balance</td>
<td>(0.6)</td>
<td>0.0</td>
<td>1.5</td>
<td>2.6</td>
<td>1.0</td>
<td>(0.2)</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>China's molybdenum output (2)</td>
<td>4.7</td>
<td>6.6</td>
<td>8.1</td>
<td>7.3</td>
<td>7.3</td>
<td>8.0</td>
<td>9.4</td>
<td>9.6</td>
</tr>
<tr>
<td>China's molybdenum import (3)</td>
<td>1.4</td>
<td>0.8</td>
<td>0.3</td>
<td>3.5</td>
<td>1.7</td>
<td>0.9</td>
<td>0.6</td>
<td>1.3</td>
</tr>
<tr>
<td>China's molybdenum export (3)</td>
<td>3.4</td>
<td>3.4</td>
<td>2.5</td>
<td>0.8</td>
<td>2.0</td>
<td>1.7</td>
<td>1.3</td>
<td>2.0</td>
</tr>
<tr>
<td>China's molybdenum consumption (2)</td>
<td>2.6</td>
<td>4.0</td>
<td>4.7</td>
<td>5.4</td>
<td>6.7</td>
<td>7.6</td>
<td>8.3</td>
<td>9.0</td>
</tr>
<tr>
<td>Supply and demand balance of molybdenum In China</td>
<td>0.0</td>
<td>0.0</td>
<td>1.3</td>
<td>4.6</td>
<td>0.4</td>
<td>(0.4)</td>
<td>0.4</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Price of molybdenum concentrate (yuan/ton degree) (4)</td>
<td>4,077</td>
<td>4,130</td>
<td>3,528</td>
<td>1,750</td>
<td>2,000</td>
<td>2,044</td>
<td>1,632</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Source: (1) CITIC Securities, SWS research report; (2) IMOA; (3) China Nonferrous Metals Industry Association, Customs, Antaike; (4) Asian metals.
1. Market Analysis and Outlook of the Molybdenum Industry – Price

- Molybdenum price has been lower than the cost of domestic molybdenum production.
- Supply growth is limited and the market price is at a 5-year low.
- Outlook: With the gradual recovery of the global economy, molybdenum price will recover.

**Price trend of molybdenum concentrate**

- Peak: 2488 yuan/ton degree
- Average price: 1864 yuan/ton degree
- The production cost of CMOC is less than 1300 yuan/ton degree
- Weak demand leads to gradual decline in price
- The lowest price: 1414 yuan/ton degree
- Since the beginning of 2013, stainless steel factories have reduced production.
- From 2009, steel production increases due to global economic recovery.

Source: Asian Metals.
2. Market Analysis and Outlook of the Tungsten Industry – Industry Profile

Unique strategic metal in important for national economy and modern national defense, with a wide range of applications

Known as “industrial teeth”, it has a high melting point, high density and high hardness

Available downstream consumption structure of tungsten:
- Hard Alloy 56%
- Tungsten Materials 17%
- Tungsten Steel 20%
- Other 7%

Application fields
- Modern national defense
  - Aerospace: Gyroscope rotor material, Original inertial rotator parts of aircraft, Counterweight parts of Instrumentation and engine
  - Military field: A variety of ammunition production materials
  - National economy
    - Electric industry: Electric processing materials
    - Petrochemical: Tungsten catalysts and carbide drill
    - Mine drilling: Carbide drill
    - Medical appliance: Radiation shielding material and γ-ray knife

Source: USGS.
2. Market Analysis and Outlook of the Tungsten Industry – Supply

Large reserves and centralized distribution of tungsten resources in China

- One of the main resource advantages of China
  - As of 2012, global tungsten reserves amounted to about 3.2 million tons, of which China’s tungsten metal reserves amounted to 1.9 million tons, accounting for approximately 60% of global tungsten reserves

- High concentration of domestic distribution
  - Tungsten resource reserves in China are rich and the reserves distributed in national 23 provinces, municipalities, Hunan, Jiangxi, Henan and Fujian account for 87% of that of the nation

### Distribution of global tungsten reserves

- China: 59%
- Other Countries: 24%
- Bolivia: 2%
- Canada: 4%
- USA: 4%
- Russia: 8%

### Distribution of Chinese tungsten reserves

- Hunan: 45%
- Jiangxi: 21%
- Fujian: 6%
- Henan: 15%
- Guangxi: 3%
- Gansu: 2%
- Other: 8%

Source: USGS, CTIA.
2. Market Analysis and Outlook of the Tungsten Industry – Supply (Cont’d)

- China is the largest producer of tungsten, with annual production accounting for about 80% of the world’s output.
- USA is the third largest owner of tungsten reserves but has primarily acquired reserves strategically, without mining.
- Due to limited projects in the pipeline, a slowdown in tungsten concentrate production is expected.

Main Mines in Progress | Company | Tungsten Reserve (1,000 tons) | Designed Capacity (ton) | (Expected) Production time | Estimated Output (ton) 2013E 2014E 2015E
--- | --- | --- | --- | --- | ---
Yang Chu Shan Tungsten & Molybdenum Mine | Xiamen Tungsten | 96 | 2,650 | 2Q2013 | 1,500 2,000 3,000
Huanggang Mine | Inner Mongolia Huanggang Mining Industry | 700 | 2Q2013 | 300 500 700
Jianlong Mining | Heilongjiang Jianlong Mining | 1,000 | 2013 | 600 1,000 1,000
Dahutang Tungsten Mine | Minmetals | 216 | 10,000 | 2015 | Proportion of new output (Compared to national volume in 2012) 3.9% 5.6% 9.2%

Source: CTIA, USGS, research reports.
2. Market Analysis and Outlook of the Tungsten Industry – Supply (Cont’d)

Mandatory production plans and export policy will continue to effectively control the supply

- Mandatory production plan to effectively control tungsten concentrate supply growth
  - China, from 2002, began to implement allocation of total mining amount of tungsten mines
  - Over the previous 10 years, the average annual compound growth rate of China’s tungsten is 6%, significantly lower than the average growth rate of GDP

- Export quotas and taxes have lead to a declining tungsten export market
  - In 1998, the state introduced an export quota to control the export of tungsten products; in addition, the nation also guided industry to extend towards high value-added processing products through export tax administration

Source: Research reports.
2. Market Analysis and Outlook of the Tungsten Industry – Demand

- The industry will continue to develop towards downstream deep processing
- The development of China’s high-end equipment manufacturing will increase the share of overall tungsten consumption from carbide alloy products
- Metal cutting tools and petroleum mining tools is emerging as the major new end-use for tungsten
- Petroleum mining tools is the most widely applied industry of carbide alloys
  - Shale gas exploration and production is expected to further increase the demand for carbide alloys

China’s tungsten consumption structure

- Carbide Alloy 54%
- Tungsten Chemical 7%
- Tungsten Materials 15%
- Tungsten Steel 24%

European countries’ tungsten consumption structure

- Carbide Alloy 72%
- Tungsten Chemical 11%
- Tungsten Materials 8%
- Tungsten Steel 9%

Comparison between consumption ratio and production value of carbide alloy

Source: USGS CTIA, research reports.
2. Market Analysis and Outlook of the Tungsten Industry – Demand (Cont’d)

Metal cutting tools: The development of China’s high-end equipment manufacturing industry is expected to promote the wide application of metal cutting tools

- High-end equipment manufacturing is one of China’s seven strategic emerging industries which will be the priority for the state’s policy support in the next 5–10 years
- CNC machines and modern efficient cutting tools are an important area of development for the machine tool industry

**China’s CNC machine output**

**China’s metal cutting tools output**

Source: Research reports.
2. Market Analysis and Outlook of the Tungsten Industry – Demand (Cont’d)

Petroleum mining tools: Petroleum mining and shale gas exploration is expected to maintain carbide alloy’s continuous consumption growth

Significant rebound in China’s fixed assets investment in oil and gas exploration

Sales income from special oil drilling equipment maintaining growth

Source: Research reports.
# 2. Market Analysis and Outlook of the Tungsten Industry – Price

## Forecast of tungsten supply and demand

<table>
<thead>
<tr>
<th>'0,000 tons unless otherwise stated</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013E</th>
<th>2014E</th>
<th>2015E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output growth rate of tungsten concentrate</td>
<td>1%</td>
<td>24%</td>
<td>5%</td>
<td>(3%)</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Output of Tungsten Metal</td>
<td>5.10</td>
<td>5.90</td>
<td>6.18</td>
<td>6.20</td>
<td>6.26</td>
<td>6.39</td>
<td>6.52</td>
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<tr>
<td>Year-on-year growth</td>
<td>16%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Net Export of Tungsten</td>
<td>0.98</td>
<td>2.24</td>
<td>2.22</td>
<td>1.71</td>
<td>1.65</td>
<td>1.86</td>
<td>1.96</td>
</tr>
<tr>
<td>Import</td>
<td>0.50</td>
<td>0.40</td>
<td>0.54</td>
<td>0.50</td>
<td>0.49</td>
<td>0.50</td>
<td>0.51</td>
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<tr>
<td>Export</td>
<td>1.48</td>
<td>2.64</td>
<td>2.76</td>
<td>2.21</td>
<td>2.14</td>
<td>2.36</td>
<td>2.47</td>
</tr>
<tr>
<td>Consumption of Tungsten Metal</td>
<td>3.33</td>
<td>3.94</td>
<td>3.80</td>
<td>3.42</td>
<td>3.54</td>
<td>3.74</td>
<td>3.99</td>
</tr>
<tr>
<td>Demand growth rate (%)</td>
<td>(4%)</td>
<td>18%</td>
<td>(3%)</td>
<td>(10%)</td>
<td>4%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Including: consumption of carbide alloy</td>
<td>1.77</td>
<td>2.10</td>
<td>2.05</td>
<td>1.86</td>
<td>2.00</td>
<td>2.19</td>
<td>2.42</td>
</tr>
<tr>
<td>Proportion of carbide alloy consumption (%)</td>
<td>53%</td>
<td>53%</td>
<td>54%</td>
<td>54%</td>
<td>56%</td>
<td>59%</td>
<td>61%</td>
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<tr>
<td>Inventory</td>
<td>0.79</td>
<td>(0.28)</td>
<td>0.16</td>
<td>1.07</td>
<td>1.07</td>
<td>0.79</td>
<td>0.56</td>
</tr>
<tr>
<td>Price of Tungsten Concentrate (yuan/ton degree)</td>
<td>63,652</td>
<td>85,136</td>
<td>139,796</td>
<td>120,760</td>
<td>132,836</td>
<td>139,478</td>
<td>146,452</td>
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<tr>
<td>Price of APT (yuan/ton)</td>
<td>98,880</td>
<td>131,815</td>
<td>215,265</td>
<td>183,520</td>
<td>201,872</td>
<td>211,966</td>
<td>222,564</td>
</tr>
</tbody>
</table>

Source: CTIA, Wind, China Nonferrous Metals, Goldman Sachs research report.
In 2002, the Chinese government began to implement total volume control over tungsten concentrate mining. From 2006, export tax rebates of APT and other tungsten products further reduced to 5%. In 2011, the Chinese government set up access threshold for tungsten smelting enterprises.

In the short term, the price of tungsten is relatively stable. In the medium and long term, under the conditions of centralized supply, demand is promising and the price of tungsten is expected to increase.

**Price trend and outlook of China’s tungsten concentrate**

- From January 2004, the export tax rebate of tungsten concentrate was cancelled.
- From 2005, the export tax rebate of ferrotungsten was canceled and APT's export tax rebate decreased from 13% to 8%.
- From 2006, export tax rebates of APT and other tungsten products further reduced to 5%.
- In 2010, the State Administration of Work Safety issued a notice on further integration of metal ore mines.
- Before June 2011, the application for certificate of tungsten ore mining rights was suspended.
- In 2011, the Chinese government set up access threshold for tungsten smelting enterprises.
- In 2013, a leading miner increased their tungsten concentrate reserves, leading to a price hike.
- In 2009, Minmetals integrated most of the tungsten resources in Hunan province.

Source: Asian Metal, research reports.