## **OVERVIEW**

We are a leading silver producer in China, deploying a comprehensive production process designed to recover and refine non-ferrous metals to maximize economic value. According to CRU, we were ranked as the tenth largest silver producer in China in terms of annual production volume in 2011. Our silver ingots have a purity of not less than 99.995%, exceeding the China Silver Standard and the LBMA International Silver Standard, and are sold under our well-recognized brand name "Longtianyong".

Silver is a precious metal which is used widely in different industrial applications, in the manufacture of adornment jewelry and also as an investment commodity. According to CRU, China is currently the third largest silver producing country. China is also the world's largest silver consumption country. The market demand for silver products in China increased from 7,575 tonnes in 2007 to 13,044 tonnes in 2011 at a CAGR of 14.6% according to CRU, driven primarily by the fastest growing fabrication demand and increasing investments in precious metals in China. The market demand for silver fabrication products in China is forecasted to increase from 12,893 tonnes in 2012 to 14,527 tonnes in 2016 at a CAGR of 3.0% according to CRU. Although silver contracts only commenced trading on the Shanghai Futures Exchange as recently as May 2012, trading in silver contracts has since become one of the most frequently traded metals on the exchange with the highest average daily trading volume. We believe we are well-positioned to capitalize on the growing market demand for silver irrespective of whether for industrial applications, adornment jewelry or pure investment purposes.

In response to heightened concerns from the PRC regulatory authorities and the general public towards the environmental impact of operating in a highly polluting industry, we have deployed a comprehensive production process designed to fully recover and refine non-ferrous metals to maximize economic value and minimize pollution. During the production process, we recover and refine silver, lead and other non-ferrous metals from high-content ore powder, smelting slag and low-content ore powder and then process kiln slag into saleable concrete for construction use. Our production process allows us to fully utilize high-content ore powder, smelting slag and low-content ore powder so that these raw materials are comprehensively recycled to a full extent with no solid wastes being generated, as compared to the inefficient processing methods currently used by many small Chinese miners and smelters, which cause significant waste of raw materials and heavy environmental pollution. Our production process is encouraged and promoted by the PRC government. According to CRU, we were one of the first batch of companies to be certified as a "Circular Economy Exemplar Enterprise" in Jiangxi Province by the Jiangxi Development and Reform Commission because of our comprehensive production process. As of August 31, 2012, there were a total of 66 enterprises and 37 industrial or administrative units certified as "Circular Economy Exemplar Enterprise" in Jiangxi Province. In accordance with the national industrial policy, in 2010 the Jiangxi Development and Reform Commission recommended us as one of the exemplar enterprises to the NDRC which approved and awarded us RMB10 million based on the corresponding budget allocated to Jiangxi Province to further develop and enhance our circular economy production model and our production technologies and applications in recovery and refinery of rare and precious metals. Since March 19, 2012, we have also obtained GB/T 24001-2004/ISO 14001:2004 certification for our environmental management system, GB/T28001-2001 certification for our occupational health and safety management system and GB/T 19001-2008/ISO 9001:2008 certification for our quality management system. In addition, we have engaged Atkins China to undertake the Limited Phase I Environmental Due Diligence Assessment for our production facilities. Atkins China has found that based on the County EPB's confirmation dated July 23, 2012, our production facilities comply

with the environmental criteria acceptable to the County EPB, and that there have not been any recorded environmental non-compliances by us at all facilities, nor have there been any formal environmental citations or punishments issued to us. Atkins China has identified a number of areas for pollution control improvement and we have taken on these improvement measures. With these measures in place and implemented during the operation of our production facilities, Atkins China considers that reasonable measures have been undertaken to comply with the statutory pollution control requirements.

We commenced silver production in 2002. Over the years, our strong focus on the production of silver has enabled us to develop a highly efficient and advanced ore powder and smelting slag processing method. We are capable of producing silver ingots with a purity grade of 99.999%, currently the world's highest standard in silver production. Our principal product, silver ingots, typically have a purity grade of not less than 99.995%, exceeding the China Silver Standard and the LBMA International Silver Standard. These capabilities illustrate our leading silver production technology and our commitment to research and development to further enhance our ability in quality and reliable production. To further enhance our research and development capability, we collaborate with well-established institutions, such as Jiangxi University of Science and Technology, on various research and development projects to further improve our production technology and product quality. Our silver ingot under the "Longtianyong" brand was admitted to the silver list of the LBMA Good Delivery List on December 28, 2011. The LBMA Good Delivery List is currently widely recognized as representing the de facto standard for the quality of gold and silver bars, largely due to the stringent criteria for assaying standards and bar quality that an applicant must satisfy in order to be admitted to the list. Our admission to the silver list of the LBMA Good Delivery List has enabled our silver ingot to become internationally acceptable silver ingot for global settlement, which has further strengthened our leading position in silver production technology and process, and represents an important accreditation of the high purity of our silver ingot. Furthermore, according to CRU, we are the only non-state-owned or -controlled entity among the seventeen Chinese enterprises whose products are accepted by the LBMA Good Delivery List. Domestically, our "Longtianyong" branded silver ingot has been ranked by the Shanghai White Platinum & Silver Exchange as one of the 20 most popular silver brands since 2005.

Over the years, we have established a strong and diversified customer base consisting of 20 to 30 major Chinese downstream manufacturers or metal trading companies, many of which are among the largest or leading enterprises in the end-user markets for silver products in China. For example, our largest customer is China Minmetals Nonferrous Metals Co., Ltd. (五礦有色 金屬股份有限公司), which is a state-owned enterprise with a large market share in China's non-ferrous metal markets. Our other major customers include China National Nonferrous Metals Import & Export Jiangxi Corporation Limited (中國有色金屬進出口江西有限公司), the parent of which is a leading state-owned resource enterprise in China's non-ferrous metal industry, and Guilin Coninst Electrical & Electronic Material Co., Ltd. (桂林金格電工電子材料科技有限公司), a leading manufacturer of low voltage, high voltage and vacuum contact materials and wholly-owned by China National Machinery Industry Corporation (中國機械工業集團有限公司), which is a large state-owned machinery manufacturer in China, as well as a Global 500 company. Our five largest customers accounted for approximately 75.7%, 66.3%, 68.1% and 71.3% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. As a result of our proven track record in consistently producing high quality silver ingots, we have established long term relationships with our customers, and believe that demand from our established customer base will rise in tandem with the expansion of our production capacity going forward.

We recover and refine silver from high-content ore powder, smelting slag and low-content ore powder, which also contain lead, bismuth, antimony and other metals that are commercially valuable. During the production process of our silver ingot, we also recover and refine other metal by-products which have commercial value, including lead ingot (since 2009) and bismuth ingot and antimony ingot (both since 2010). Our revenue increased significantly from RMB289.7 million for the year ended December 31, 2009 to RMB559.3 million for the year ended December 31, 2010 and further to RMB984.2 million for the year ended December 31, 2011, representing a CAGR of 84.3%, and our net profit was RMB37.1 million, RMB98.3 million and RMB115.4 million, respectively, for the same periods, representing a CAGR of 76.3%. Our revenue increased by 36.9% to RMB620.9 million for the six months ended June 30, 2011, while our net profit for the same period decreased by 39.3% from RMB89.7 million to RMB54.5 million. See the section headed "Financial Information — Principal Factors Affecting Our Results of Operations" in this prospectus for more information.

#### **OUR COMPETITIVE STRENGTHS**

We believe that the following competitive strengths are key factors for our ongoing success and will help us maintain our leading market position and capture the anticipated future growth in the silver market:

#### We have established a leading position in the Chinese silver industry

We commenced our production of silver ingots in 2002 and since then, we have established ourselves as one of the leading silver producers in China. Driven by the robust growth in the silver market in China, we increased our annual production capacity of silver ingots to approximately 250 tonnes in 2009, with our revenue increasing significantly from RMB289.7 million for the year ended December 31, 2009 to RMB559.3 million for the year ended December 31, 2010 and further to RMB984.2 million for the year ended December 31, 2012, we achieved a total production volume of 83.2 tonnes of silver ingots, compared to 56.3 tonnes for the same period in 2011. According to CRU, we were ranked the tenth largest silver producer in China in terms of annual production volume in 2011. Due to our advanced production process and management system, we believe that we are well-positioned to capture the future growth in demand in the silver industry driven by the market demand in China's end-user market.

# We deploy a central and local government encouraged comprehensive production process designed to fully recover and refine non-ferrous metals to maximize economic value and minimize pollution

Our current production processes enable us to recover and refine non-ferrous metals from high-content ore powder, smelting slag and low-content ore powder, utilize all materials and resources, and fully recycle all materials with no solid wastes being generated. In addition to silver ingot and lead ingot, we are able to recover and refine other products such as bismuth ingot, antimony ingot, zinc oxide and non-standard gold. We also process kiln slag into saleable concrete for construction use. All of these factors have reduced our cost of production and improved our profitability. According to CRU, we are one of the first batch of companies to be certified as a "Circular Economy Exemplar Enterprise" by the Jiangxi Development and Reform Commission because of our comprehensive production model. We believe our production model allows us to achieve production efficiency, cost effectiveness, energy efficiency, minimal pollution and environmental protection.

China's silver industry is characterized by a large number of small miners and smelters which use inefficient processing methods to produce silver, causing significant waste of raw materials and heavy environmental pollution. With China's twelfth Five Year Plan setting a goal of transforming China's economic development model, the NDRC has issued policy statements to promote efforts to reduce pollution emission, improve energy efficiency and achieve efficient use of resources. Our comprehensive production model is encouraged by the central and local governments. On July 21, 2010, the NDRC issued a notice to provincial development and reform commissions and other relevant local authorities for the selection of exemplar enterprises in accordance with the national industrial policy. The NDRC would invest in such enterprises based on the budget allocated by the central government to different provinces and autonomous regions. The selection criteria include, among others, adopting a circular economy production model, achieving efficient and comprehensive utilization of resources in production, a proven record of financial performance and a large investment scale. The Jiangxi Development and Reform Commission recommended us as one of the exemplar enterprises in Jiangxi Province to the NDRC which approved and awarded us RMB10 million to further develop and enhance our circular economy production model and our production technologies and applications in recovery and refinery of rare and precious metals.

# We possess advanced silver production technology and techniques, which enable us to produce silver ingots with a purity grade of 99.999%, currently the world's highest standard in silver production

Through our continuous efforts to enhance our production technology and strong commitment to research and development, all the silver ingots we produced have a purity grade of not less than 99.995%. We are able to produce silver ingots with a purity grade of 99.999%, currently the world's highest standard in silver production.

Furthermore, our silver ingot under the "Longtianyong" brand was admitted to the silver list of the LBMA Good Delivery List on December 28, 2011. The LBMA Good Delivery List is widely-recognized as representing the de facto standard for the quality of gold and silver bars, largely due to the stringent criteria for assaying standards and bar quality that an applicant must satisfy in order to be admitted to the list. Our admission to the silver list of the LBMA Good Delivery List has enabled our silver ingot to become internationally acceptable silver ingot for global settlement, which has further strengthened our leading position in silver production technology and process. Furthermore, according to CRU, we are the only non-state-owned or -controlled entity among the seventeen Chinese enterprises whose products are accepted by the LBMA Good Delivery List. Domestically, our "Longtianyong" branded silver ingot has been ranked by the Shanghai White Platinum & Silver Exchange as one of the 20 most popular silver brands since 2005. In addition, we obtained GB/T 19001-2008/ISO 9001:2008 certification for our quality management system in relation to production of silver, lead and zinc oxide series products on March 19, 2012. All of the above achievements illustrate our leading silver production technology and our commitment to research and development to further enhance our ability in quality and reliable production.

Over the years, our strong focus on the production of silver has enabled us to develop a highly efficient ore processing method in silver production. We believe we possess the proprietary know-how in selecting the most appropriate technique for different types of raw materials and for different stages of the production process. In addition, we have owned or independently developed several advanced production techniques and technologies in smelting and refining other non-ferrous metals. We are also collaborating with well-established research institutions, such as Jiangxi University of Science and Technology, on various research and development projects to

further improve our production technology and product quality. We have obtained the local municipal approval under which our technology and engineering center for smelting and deep processing of non-ferrous metals has been qualified as a research center at municipality level in Ji An City, Jiangxi Province. Our production capacity and proven track record allow us to meet our customers' increasing demand for silver ingots with sizeable quantity and consistent quality, and further strengthen our competitive position in China's silver market.

# We have established a strong and diversified customer base consisting of major Chinese downstream manufacturers and metal trading companies, many of which are among the largest or leading enterprises in the end-user markets for all aspects of applications and uses of silver products in China

We have a proven track record of delivering consistently high-quality silver ingots to our customers. Over the years, we have established a strong market reputation and well-recognized credibility among customers. Our solid long-term relationships with our customers had been a key driver for the rapid growth in our business and profitability during the Track Record Period. Over the years, we have established a strong and diversified customer base consisting of 20 to 30 major Chinese downstream manufacturers or metal trading companies, many of which are among the largest or leading enterprises in the end-user markets involving all aspects of applications and uses of silver products in China, especially in electrical and electronic applications, jewelry adornment, silverware and investment.

customer China Minmetals Nonferrous Our largest is Metals Co.. Ltd (五礦有色金屬股份有限公司), which is a state-owned enterprise with a large market share in China's non-ferrous metal markets. Our other major customers include China National Nonferrous Metals Import & Export Jiangxi Corporation Limited (中國有色金屬進出口江西有限公司), the parent of which is a leading state-owned resource enterprise in China's non-ferrous metal industry, and Guilin Coninst Electrical & Electronic Material Co., Ltd. (桂林金格電工電子材料科技有限公司), a manufacturer of low voltage, high voltage and vacuum contact materials and wholly-owned by China National Machinery Industry Corporation (中國機械工業集團有限公司), which is a large state-owned machinery manufacturer in China, as well as a Global 500 company.

In addition, our customers are geographically diversified and located across China, including Beijing, Hubei Province, Jiangxi Province, Guangxi Autonomous Region, Shanghai and Zhejiang Province. We believe the key benefits from our established relationships with a diversified customer base are a higher degree of stability and growth potential in demand for our products, lower cost in retaining existing customers compared with the higher cost in attracting new customers, and endorsements from our existing customers. Furthermore, our existing customers' recognition of our ability to provide consistently high quality silver ingots in sizeable quantities has allowed us to establish a long term relationship with our customers. We believe that the forecast growth in demand for silver in China will drive up the demand from our established customer base, in tandem with the expansion of our production capacity.

# We have an experienced management team with significant industry expertise

We are led by an experienced and dedicated management team. Our management has played a key role in delivering consistently high quality silver ingots with high purity grade of not less than 99.995% to customers. All the members of our senior management team are university or tertiary educated or above and have experience in relevant fields of metal industry. In particular, Mr. Chen Wantian (陳萬天), the co-founder of Longtianyong Nonferrous Metals and the chairman and chief executive officer of our Company, has more than ten years of experience in the metal mining and

processing industry. He is primarily responsible for the overall corporate strategies, management, planning and business development of our Group. Mr. Song Guosheng ( $\frac{1}{2}$ ), the deputy general manager of our Group in charge of our production management and research and development, has approximately 17 years of experience in the metallurgical industry. They bring together strong technical expertise and experience in, and in-depth knowledge of, the silver production industry.

Our Directors believe that our experienced and committed management team enhances our ability to develop and implement our strategies quickly in response to market changes. We believe that our management team possesses in-depth knowledge critical to our Group's success in the silver production industry and is capable of identifying and seizing market opportunities, formulating sound business strategies, assessing and managing risks, implementing production plans, and increasing our overall profit.

# **OUR STRATEGIES**

We aspire to become a leading global silver producer by further strengthening our established market position in the silver industry in China. We aim to achieve sustainable growth of our business and further enhance our competitiveness. To achieve this, we intend to focus on the following strategies:

#### Expand production capacity to further strengthen our established market position

The market demand for silver fabrication products in China is forecasted to increase from 4,725 tonnes in 2012 to 6,225 tonnes in 2016 at a CAGR of 7.1%, according to CRU. We plan to further expand our production capacity to meet the growing demand for silver.

We own the land use rights to three parcels of adjacent land with a total area of approximately 200,000 square meters that is located in Western Industrial Park, Yongfeng County, Jiangxi Province. Our current production facilities have a total designed annual production capacity of approximately 250 tonnes of silver ingots and occupy approximately two-thirds of the land. To capture the growth potential in the silver market, we intend to continue to expand our production facilities, warehouses, staff dormitories and ancillary facilities on the remaining undeveloped portion of the land, and purchase additional machinery and equipment, and we expect to gradually achieve an annual silver production capacity of 400 tonnes by 2013, 550 tonnes by 2014 and 650 tonnes by 2015. By using the net proceeds from the Global Offering, we will purchase production equipment and machinery of RMB67.5 million and construct new production units of RMB47.5 million to achieve the designed annual production capacity of 650 tonnes of silver ingots, which is subject to fine-tuning, technical improvement and adjustment of our integrated production system, recruiting of additional staff and improvement of our production workers' proficiency.

We intend to strategically diversify our products and their respective end-user markets, which to some extent will enable us to reduce volatility of our earnings and our risk exposure within any single product market. We plan to construct a gold production plant, which will use the hydrometallurgical extraction process to extract gold. We plan to achieve a total designed annual production capacity of approximately 1,500 kilograms of gold by 2014 for this plant and approximately 3,000 kilograms of gold by 2015. We expect to utilize part of the net proceeds from the Global Offering to fund the planned capital expenditure for the purchase of production machineries and equipment in connection with the gold production plant, which amounted to RMB4.0 million (equivalent to approximately HK\$4.9 million).

To expand our sales in tandem with the expansion of production, we plan to strengthen our existing relationships with domestic customers and further diversify our customer base by securing new customers, increasing our sales channels, and exporting our silver ingots to international customers in the future. Our potential new customers include banks and financial institutions who are engaged in trading of silver in international and domestic commodity markets and have substantial demand for silver for hedging and investment purposes. Certain international banks and financial institutions have actively engaged in financing physical inventory and trading physical precious metals in Asia in recent years and have purchased silver ingots in considerable quantities to meet their trading requirements. In 2011, certain Chinese state-owned commercial banks launched silver investment instruments backed by physical silver for individual investors as an investment and trading option, and the trading volume of such instruments has substantially increased following the launch of such investment option. Shanghai Gold Exchange has also recently proposed to introduce a market maker system for trading of precious metals including silver, which would allow banks and financial institutions to stock and trade precious metals in large quantities far exceeding current trading volumes. All of these developments are expected to increase overall demand for silver and present new business opportunities to us.

# Further enhance our research and development capabilities in production technology

We will continue to focus on developing advanced production technologies, aiming to improve our production techniques and processes, reduce our production costs, enhance our production efficiency and energy-saving features, improve our recycling use of scrap and reduce environmental emission. We have obtained the local government approval which qualifies our technology and engineering center for smelting and deep processing of non-ferrous metals as a research center at municipality level in Ji An City, Jiangxi Province, in recognition of our achievement in non-ferrous metal smelting and deep processing. We plan to further improve our research and development facilities by purchasing additional research tools and equipment and to apply to qualify our research center as a provincial level research center.

We aim to develop new non-ferrous metal production techniques and technologies to broaden our product portfolio and improve our production processes through our technology and engineering center and our continuing collaborative research and development activities with wellestablished research institutions and universities. Our research and development activities will be focused on developing new production techniques and technologies to improve recovery rates of other non-ferrous metal by-products that we are producing or to enable us to recover and refine new non-ferrous metal by-products. We plan to develop the hydrometallurgical extraction process to improve our current recovery rate of gold and construct a production plant which will use such extraction process to extract gold that will qualify as standard gold. Furthermore, we will recruit more research and development personnel and procure advanced equipment and systems to develop new production technology for other metals, for example, selenium, which have good commercial value and high market demand.

We will continue to leverage our strength in advanced production technologies and enhance our research and development capabilities, which will not only help us maximize utilization of resources and increase our production output, but also strengthen our leading position as a "Circular Economy Exemplar Enterprise".

# Further expand and upgrade our infrastructure and systems for environmental protection

We believe that environmental protection is important for the sustainable development of our business. We have obtained ISO 14001 environmental system certification for our silver production process. The effective implementation of our environmental protection measures will further reduce our production cost, minimize our potential environmental liability and improve our market competitiveness.

We intend to continue improving and upgrading our environmental protection system and adopting new techniques and technologies to further minimize impact of emission on the environment and recycle waste materials more effectively. For example, one of our objectives in environmental protection is to enhance the treatment and recovery of sulfur dioxide, the main emission in our production. We plan to adopt the sodium sulfide-sulfur process, an advanced desulfurization treatment method to treat sulfur dioxide. After the treatment, sulfur dioxide is converted into sulfur products which have good commercial value and are widely used in various industries and in high demand in China. We expect the improvement and upgrade of our environmental protection system to be completed by 2014. In addition, we intend to implement environmental improvement measures to our production facilities, such as an inspection system to keep our production equipment in good conditions and improvement of our drainage system. We believe the upgrade and improvement in our environmental protection system will further strengthen our leading position in adopting a comprehensive model that is promoted by the Chinese government.

# Explore and pursue suitable acquisition or investment opportunities in upstream ore supply

Ore with silver content is our principal raw material and our ability to secure a stable and sufficient supply of quality-grade silver ore will be crucial to our future profitability. In view of our plan to expand our production capacity, we intend to seek opportunities to acquire, or invest in, silver polymetallic mines.

Through such acquisition or investment, we aim to achieve a vertical integration with upstream ore mines and create synergies across different business segments of our operations. In assessing acquisition opportunities, we will carefully consider and seek to balance a variety of factors, including:

- whether the costs and benefits of an acquisition satisfy our internal financial requirements;
- whether the acquisition fits our corporate strategy and long term plan;
- the synergy between our Group and potential targets in terms of technology and knowhow, management expertise, and business compatibility;
- geographical proximity to our existing operations; and
- whether the acquisition can enhance the overall competitiveness and sustainability of our existing and future businesses.

As of the Latest Practicable Date, we have not had any experience in operating any mine and did not possess any relevant expertise, nor had we entered into any definitive agreement with

any party to acquire any business or entity owning an upstream ore mine. See the section headed "Risk Factors — Our acquisition and investment strategies may not be successful" in this prospectus for further details. In the event that we acquire any mine, we undertake to prepare and disclose a Competent Person's Report in accordance with the requirements under Chapter 18 of the Hong Kong Listing Rules.

# **OUR PRODUCTS**

Silver ingot is our principal product and we derived a significant majority of our revenue from the sale of silver ingots during the Track Record Period. We intend to continue focusing on producing silver ingots and further strengthen our market position in the silver segment, and as such we expect that sales of silver ingots will continue to account for a significant percentage of our revenue. Our silver ingots are used in a wide range of industries and across diverse end-user markets.

Silver is rarely found on its own in nature, and is found mostly in ores which also contain lead, zinc, gold and copper, which are commercially valuable. Although silver ingot is our principal product, during our recovery, refinery and manufacturing process of silver ingot, we also recover and refine other metal by-products which have commercial value, including lead ingot, bismuth ingot and antimony ingot.

# **Principal Product**

#### No. 1 International Silver Ingot

Silver ingot is our principal product, which accounted for approximately 88.4%, 72.0%, 73.1% and 75.5% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

Silver is a precious metal with unique physical properties including strength, malleability and ductility, thermal and electrical conductivity, high reflectance, and temperature resistance. As one of the best electrical and thermal conductors, silver has been widely used in electrical switches and other applications. In industrial manufacturing processes, it is used as a catalyst and is used in brazing and soldering as well. It is also incorporated into health and medical applications given its natural antibacterial quality. In addition, silver has been used throughout history in adornment jewelry and as a currency, as well as an investment option.

We believe our refinery and recovery technology sets us apart from our competitors in China and our proprietary production process is key to our success. We have achieved a recovery rate of not less than 99% for silver and our silver ingots have a purity grade of not less than 99.995%. We are capable of producing silver ingot with a purity grade of 99.999%, currently the world's highest standard in silver production.

Because of the high quality of our silver ingot, our PRC operating subsidiary, Longtianyong Nonferrous Metals has been admitted to the silver list of the LBMA Good Delivery List since December 28, 2011, after having met the relevant LBMA criteria, and successfully passed the LBMA quality tests on our ingots and demonstrated our melting and assaying capability. According to CRU, we are one of the seventeen silver producers and the only non-stated-owned or -controlled entity in China admitted to the LBMA Good Delivery List. The LBMA is the London-based trade association that represents the wholesale market for gold and silver in London. London

is the focus of the international over-the-counter market for gold and silver, with a client base that includes the majority of the central banks that hold gold, together with producers, refiners, fabricators and other traders throughout the world. The LBMA Good Delivery List is now widely recognized as representing the de facto standard for quality of gold and silver bars, largely due to the stringent criteria for assaying standards and bar quality that an applicant must satisfy in order to be admitted to the list. The LBMA conducts on-site inspection every three years after admission and renews the admission only if a producer continues to meet the assaying criteria and product quality standards.

In addition, the "Longtianyong" brand for our silver ingot was ranked as one of the 20 most popular silver brands in China for eight consecutive years, since 2005, by the Shanghai White Platinum & Silver Exchange. We have submitted the application to register our "Longtianyong" brand for silver trading settlement on the Shanghai Futures Exchange. In order to be eligible as a registered silver trading settlement brand on the Shanghai Futures Exchange, our silver ingot must meet the standard of delivery under relevant contracts and pass the field inspection by a quality inspection agency designated by the Shanghai Futures Exchange relating to quality management system, inherent quality, apparent quality, package, measurement, product process flow and equipment operation. In addition, our production process must have complied with China's industrial policies and met the environmental protection requirements and standards, and our company is considered reputable in China's silver market. We expect that the registration will become effective by end of December 2012.

# **By-products**

During our manufacturing process of silver ingot, we also recover and refine other metal by-products which have commercial value, and sell such by-products to our customers. Because the purchase price of our raw materials is determined by the content levels of silver and lead contained in the raw materials and the content of other metals and minerals is disregarded in determining the purchase price of raw materials, our ability to recover and refine other metals will increase our profit margin and our profitability.

#### No. 1 Lead Ingot

Lead has a high level of corrosion-resistance, ductility and malleability, and a relatively low melting point at 327.4 degrees Celsius. It is used in construction, containers for military use, tunnels, batteries, and as the outer cover of electric cables. It is also widely used as a barrier to provide protection against radiation.

No. 1 Lead Ingot is our largest by-product. The sales of our lead ingot accounted for approximately 10.1%, 18.7%, 13.9% and 13.6% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

#### No. 1 Bismuth Ingot

Bismuth is a non-ferrous metal that is not malleable but can easily be ground into a powder form. It is used in the manufacture of pharmaceuticals, semiconductors, fireproof agents, superconductive materials, cosmetic products, nuclear energy products and storage batteries.

The sales of our No. 1 Bismuth Ingot, accounted for nil, approximately 2.3%, 7.0% and 6.1% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. We use in-house-manufactured bullion lead alloy to manufacture bismuth ingot.

#### No. 0 Antimony Ingot

Antimony is a non-ferrous metal with the highest possible density and a poor conductor of electricity and heat. Antimony is commonly used as a fire-resistant additive to plastics and other materials, as well as a raw material in manufacture of batteries, chemical and other products.

The sales of our No. 0 Antimony Ingot accounted for nil, approximately 4.0%, 4.1% and 3.8% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. We use in-house-manufactured bullion lead alloy to manufacture antimony ingot.

#### Non-standard gold and others

The sales of our non-standard gold and other products accounted for approximately 1.5%, 3.0%, 1.9% and 1.0% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

#### Non-standard gold

Non-standard gold refers to gold bullion which does not satisfy both standard content requirements and standard weight requirements set by the Shanghai Gold Exchange. Non-standard gold is commonly used for the making of adornment jewelry, coinage and other arts.

# Zinc oxide

Zinc oxide is an odorless and water-insoluble powder which is mainly used in pharmaceutical, cosmetic, paints, electronic and other industries.

#### Concrete for construction use

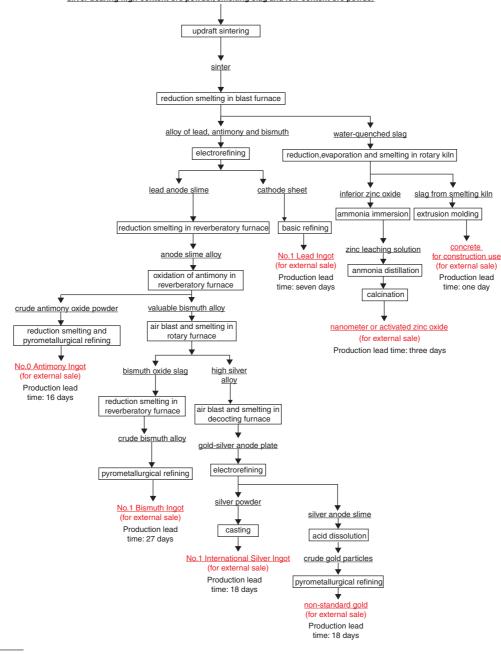
Since 2011, we have utilized and processed kiln slag into concrete for construction use. We have developed markets for such by-products, which enables us to reduce our cost, increase our profitability, and reduce the environmental impact of our operations.

#### **PRODUCTION PROCESS**

We deploy a comprehensive production process designed to fully recover and refine nonferrous metals to maximize economic value and minimize pollution. Under our production process, we recover and refine silver, lead and other non-ferrous metals from high-content ore powder, smelting slag and low-content ore powder, and then process kiln slag into saleable concrete for construction use. We adopt a combination of pyrometallurgy and hydrometallurgy, with pyrometallurgy as our main production technology for most of the processes. Our production model enables us to minimize solid waste disposal and maintain a comprehensive production process. Our silver production facilities have used the smelting process by means of electrolytic reduction.

In our production process, silver ingot and other by-products are produced from high-content ore powder, smelting slag and low-content ore powder through sintering, blasting, reduction, smelting air blast oxidization and electrolytic reduction in blast furnace, reverberating furnaces, rotary furnace, rotary kiln and refinery.

The diagram below illustrates the major steps of our comprehensive production process (including the production lead time for our respective products):



silver-bearing high-content ore powder, smelting slag and low-content ore powder

1. " " denotes interim product

2. "
]" denotes process

#### Main Production Processes for Silver Ingot

We add and mix certain supplemental materials into high-content ore powder, smelting slag or low-content ore powder during the smelting process. The mixed materials are fed into an updraft sintering machine and then charged to a blast furnace for reduction smelting. After reduction smelting, lead-antimony-bismuth alloy, which contains a number of metals such as silver, lead, antimony, bismuth and gold, and water-quenched slag are produced. The leadantimony-bismuth alloy is further refined to separate lead from a mix of silver, bismuth and antimony, and lead anode slime is produced during this process.

Lead anode slime is then refined in a reverberating furnace for reduction smelting and air blast oxidization with zinc. During this process, antimony, which is prone to be oxidized and volatilized, is separated from silver, lead and bismuth. Bullion bismuth alloy and crude antimony oxide powder are also produced. Bullion bismuth alloy is refined in a rotary furnace for air blast oxidization. Most of the bismuth is oxidized into bismuth oxide slag and separated from silver. Alloy with a high silver content is then produced.

Thereafter, alloy with a high silver content is refined in a decocting furnace for air blast smelting. Impurities containing metals difficult to be oxidized are removed. Crude silver is produced and casted into an anode plate which is refined in a silver electrolytic plant to produce silver powder. After deionized rinsing and drying, silver powder is melted and casted into silver ingots.

In general, we are able to produce silver with a higher purity than other silver manufacturers in the same industry mainly by: (1) utilizing advanced purification technology with advanced roasting furnaces, which we have independently developed and own, to first remove impurities which are difficult to remove and affect the subsequent silver electrolytic refining process, in order to produce crude silver with a high purity; and (2) using our proprietary electrolyte purification technology in the silver electrolytic refining process, in order to strictly control and limit the concentration of metallic impurities in silver electrolyte to a minimal level.

# **Ancillary Production Processes for By-products**

#### No. 1 Lead Ingot

Lead-antimony-bismuth alloy is refined through a pyrometallurgical process and an electrolytic process. Lead is first separated from silver, bismuth and antimony. Then, lead ingot and lead anode slime are produced. Lead anode slime is an interim product which can be further processed into silver and other by-products.

# No. 1 Bismuth Ingot

Bismuth oxide slag is produced after air blast oxidization in a rotary furnace. The bismuth oxide slag is then refined in a reverberating furnace for reduction smelting to produce crude bismuth alloy. Crude bismuth alloy is refined in a pyrometallurgical process to remove impurities containing silver, lead, antimony and copper. Bismuth ingot is produced.

#### No. 0 Antimony Ingot

Crude antimony oxide powder is produced after air blast oxidization. It is then refined in a pyrometallurgical process to remove impurities. Antimony ingot is produced.

# Non-standard gold and others

# Non-standard gold

Non-standard gold is produced from silver anode slime after a hydrometallurgical process and a pyrometallurgical process.

# Zinc oxide

Water-quenched slag is produced after reduction smelting is refined in a rotary kiln to produce inferior zinc oxide and kiln slag. Inferior zinc oxide is processed in ammonia immersion, ammonia distillation, calcination and other steps. Nanometer zinc oxide, or activated zinc oxide, is produced.

# Concrete for construction use

Kiln slag is processed into saleable concrete for construction use.

# **Chemicals Used and Produced during Production**

Except for nitric acid, a toxic and hazardous chemical used in the production sub-processes for silver ingot and non-standard gold, no other toxic or hazardous chemicals are used in our production process.

Sulfur dioxide is the primary hazardous chemical substance produced during our production process when industrial kilns and furnaces are involved. In addition, the other hazardous chemical substance of slag is generated in our production process.

# **Comprehensive Recycling Process**

Raw materials in forms of silver-bearing ore powders or smelting slags are processed repeatedly and recycled through over 30 consecutive production sub-processes, which include reduction smelting, hydrometallurgical processing and pyrometallurgical refining. We strictly control every step of our production process and adjust technical parameters and operation conditions in accordance with content levels of non-ferrous metals contained in raw materials and interim products.

With our comprehensive production process and our advanced silver production technologies and techniques, we are able to refine and recycle slag that are generated in small quantities in our production and further recover and refine silver and other non-ferrous metals which have commercial values. For example, through our production cycle, we take slag from smelting kilns, subject it to the extrusion molding process, and produce concrete for construction use. We also further recover and refine non-ferrous metals in slag by recycling it through a rotary kiln, blast furnace or reverberatory furnace. For substandard products, we identify the specific production sub-process that has caused the problem and such products are re-processed until they meet technical standards for the next production sub-process.

# **OUR PRODUCTION FACILITIES**

We commenced our silver production on leased premises in 2002. In 2006, we obtained the land use rights of our first parcel of land, which is located in Western Industrial Park of Yongfeng

County, Jiangxi Province, PRC. In the same year, we obtained governmental approvals for the construction of our current production plant and facilities, office buildings and staff dormitories on the land. We commenced the Phase I construction of our current production plant in 2006 while continuing silver production at the old production site. In 2009 and 2011, we obtained the respective land use rights of two other parcels of adjacent lands and continued to expand and build our production facilities. We completed the Phase I construction of our current production plant by the end of 2008 and subsequently went through the trial production for fine-tuning and technical improvement and adjustment in 2009.

At our former leased production site, we recovered and refined silver from anode slimes. Over the years, we have developed techniques and know-how to recover and refine silver directly from high-content ore powder, smelting slag and low-content ore powder. After we moved to our current production plant, we were able to commence production of silver from ore powder and smelting slag using the new production equipment in our current plant. Our current production plant has a designed annual production capacity of 250 tonnes of silver ingots. Our production facilities are an integrated production system, which recovers, recycles and refines non-ferrous metals.

Our current production plant was installed with more advanced production facilities and has a higher designed annual designed production capacity of 250 tonnes of silver ingots than our old production plant. Our current production plant produces silver ingot from ore powder and smelting slag and is capable of refining additional non-ferrous metals, such as antimony and bismuth, while our old production plant produced silver ingot from anode slime, an interim product of our current production plant. Our old production plant produced 59.1 tonnes of silver ingots in the year ended December 31, 2009 when it was in operation with an annual designed production capacity of 100 tonnes of silver ingots and the utilization rate of 2009 was approximately 59.1%. Our current production plant produced 83.2 tonnes of silver ingots in the six months ended June 30, 2012 with an annual designed production capacity of 250 tonnes of silver ingots and the corresponding utilization rate was approximately 66.6%. We are gradually improving our production utilization efficiency rate of our current production facility as further described below.

Our principal equipment includes reverberating furnaces, electrolytic plants, blast furnaces, refinery furnaces, decocting furnaces, rotary kilns, sintering machines, rotary furnaces, casting machines, and continuous casting and rolling lines, which we purchased from domestic equipment suppliers. During the Track Record Period, we did not experience any difficulties in sourcing and purchasing our principal equipment, nor did we experience any production interruption due to malfunction or defect of our principal equipment.

Our production consists of a number of furnace reverberating and blasting processes. Furnaces require a significant start up time and therefore it is both more cost-efficient and energy efficient to maintain a continuous "24/7" production process subject to routine maintenance and repairs of our various furnaces. We have adopted a rotating maintenance schedule for our furnaces and have also designated, at all times, a backup furnace. As such, our maintenance schedule has no effect on our production or financial results. Our production staff work in three eight-hour shifts per day.

The following table sets forth information relating to the designed annual silver production capacity of our integrated production system, actual silver production volumes and utilization rates for the periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2009	2010	2011	2011	2012
Designed annual silver production capacity (tonnes)	250	250	250	250	250
Actual silver production volume (tonnes)	88.7	104.4	112.9	56.3	83.2
Utilization rate <sup>(1)</sup>	35.5%(2)	41.8%	45.2%	45.0%(3)	$66.6\%^{(3)}$

(1) Utilization rate is calculated by dividing the actual production volume for the relevant period with the designed annual production capacity as of the end of the relevant period. The actual production volume is based on a production schedule of 300 days per year.

(3) These are annualized rates. In computing the annualized utilization rate, the actual production volume was multiplied by two.

Our utilization rates during the Track Record Period were low due to a number of reasons: (1) after we had completed the Phase I construction and installation of our existing integrated production system by the end of 2008, our current production plant was essentially on trial production for fine-tuning of our production system; (2) our trial production was suspended for several months for technical improvement and adjustment in 2009, which resulted in a low utilization rate as we tested out and ensured the stability of our integrated production system; (3) after the trial production and the technical improvement and adjustment, we commenced production at our current plant and since then, have gradually improved our production process and realized our production capacity; and (4) we did not have sufficient funds for our working capital at the relevant time to purchase raw materials required for a ramp up in production volumes. Following our significant capital expenditure and substantial investment in the Phase I construction and installation of our current production facilities, we have decided to adhere to our prudent financial policy by taking an approach to gradually increase our production volume in accordance with our financial means, and as a result, we have recorded a correspondingly gradual increase in our utilization rates.

After securing additional working capital from the pre-IPO investment, we have been able to substantially increase our production capacity. From June 2012 onwards, we have achieved a high or full utilization of our designed production capacity. The annualized utilization rate of our production capacity for the ten months ended October 31, 2012 was approximately 79.8%.

In anticipation of the increasing demand for silver ingot in China, we plan to continue to expand our production capacity by using the net proceeds from the Global Offering to expand and improve our existing recovery and refinery system. We expect to gradually achieve an annual silver production capacity of 400 tonnes by 2013, 550 tonnes by 2014 and 650 tonnes by 2015. We expect to be able to secure additional raw materials for our increased production because such raw materials are readily available and we enjoy well-recognized credibility among our suppliers and have mutually beneficial long-term relationships with them. As we have achieved efficiency and stability in our production process and have sufficient funding following the Global Offering, we expect that we will be able to maintain our relatively high utilization rate during the expansion of our production facilities. To manage our significant capacity growth, we plan to strengthen our

<sup>(2)</sup> The actual silver production volume in 2009 included 59.1 tonnes of silver ingots produced at our old production plant and 29.6 tonnes of silver ingots produced at our current production plant. Our old production plant had a designed annual silver production capacity of approximately 100 tonnes of silver ingots. Therefore, the utilization rate of 2009 with respect to our old production plant was approximately 59.1% and the utilization rate of 2009 with respect to our current production plant was approximately 11.8%.

existing relationships with domestic customers and further diversify our customer base by securing new customers, increasing our sales channels and exporting our silver ingots to international customers. We expect that due to domestic supply shortage of silver ingots, a strong and sustainable demand for silver ingots will continue in China. Our existing customers will continue to place orders for silver ingots in sizeable quantities. We expect that our potential new customers to include banks and financial institutions will have substantial demand for silver for hedging and investment purposes. See the paragraph headed "— Sales and Marketing — Our customers" in this section for further information.

# QUALITY CONTROL

We have built a strong market reputation based on our product quality and we have earned the strong recognition of our product quality among our customers. We place a significant emphasis on the quality control of our production process. Prior to July 31, 2012, our research and quality control department was responsible for quality control, research and development, and environmental protection and work safety. Our research and quality control department was equipped with a testing laboratory and other assaying equipment and tools, which enabled our quality control personnel to conduct testing to analyze metal content levels of our work-inprogress products. On July 31, 2012, in view of our expanded operation, and in order to strengthen our management and to stress our commitment to research, workplace safety, environmental protection and quality control, we separated the research and quality control department into three departments: namely, the research and development department, the quality control department, and the environmental protection and work safety department, to separately serve different functions (the "Function Delineation").

Prior to the Function Delineation, our research and quality control department had a total of 35 personnel, seven of whom possess university-level or higher academic backgrounds, 13 of whom have over eight years of relevant work experience, 11 of whom have over three years of relevant work experience, and 11 of whom have fewer than three years of relevant work experience. The manager of the department prior to the Function Delineation was Mr. Qu Jiyu (瞿紀育), who holds a bachelor's degree in industrial analytical technology and has 10 years of experience in business management and research and development.

After the Function Delineation became effective on July 31, 2012, we have nine full-time quality control personnel, two of whom possess university-level or higher academic backgrounds, three of whom have over eight years of experience in business management, research and development, and quality control-related fields, three of whom have over three years of experience in business management, research and development, and quality control-related fields, and three of whom have fewer than three years of experience in business management, research and development, and quality control-related fields. Our quality control staff members are all dedicated to formulating and implementing quality control measures, conducting periodic quality control examination, and conducting quality risk assessment to maintain consistent quality of our products. Mr. Qu Jiyu serves as the manager and head of the quality control department. We normally conduct examination and testing of our raw materials, products and production equipment and facilities in accordance with quality control procedures and technical specifications. During various stages of the recovery and refinery process, our quality control personnel work with production managers to periodically check on the effectiveness of the production process and to ensure that the operation of production workers are in compliance with the requirements of relevant production procedure and our production facilities meet the quality control requirements. They consult with the production managers on the need to collect samples of

work-in-progress products, test the samples and prepare test reports. If they identify any potential quality issue, they recheck records and discuss with the production managers to find out source of the problem to solve the issue.

In particular, our quality control department has formulated and implemented stringent measures to ensure that the quality of our silver ingot fully meets the specifications of purity or fineness, appearance, weight, dimensions and marks under the LBMA International Silver Standard. As a result, we were admitted to the silver list of the LBMA Good Delivery List on December 28, 2011. In respect of purity, our quality control personnel conduct assaying and testing on samples to ensure the purity of each sample is no less than 99.995%, higher than the LBMA International Silver Standard. In addition, they strictly enforce the following specifications under the LBMA International Silver Standard: (i) each silver ingot must be of good appearance without any surface cavity, crack, hole or blister, (ii) the weight of each silver ingot must be within the required silver content range, (iii) the dimensions of each silver ingot must conform to the recommended dimensions, and (iv) the product information such as serial number, assay stamp and year of manufacture must be properly marked on each silver ingot. The purity grade of our silver ingot during the Track Record Period exceeded the LBMA International Silver Standard and the China Silver Standard. During the Track Record Period, our silver ingots met the LBMA International Silver Standard and the China Silver Standard and

We also carry out regular training for our employees so that they understand the duties and requirements of their positions. Because of our stringent quality control system, our quality management system was certified by Hebei Yingbo on March 19, 2012, to conform to GB/T 19001-2008/ISO 9001:2008 standards with respect to its production of silver, lead and zinc oxide series products. The certification is effective through March 18, 2015. As a result of our high standard quality control system, we did not have any sales returns during the Track Record Period.

# SALES AND MARKETING

#### Sales and marketing team

We have built our credibility and reputation in the markets over the years and customers associate our "Longtianyong" brand with high-quality and reliability. Because of this, and also due to the nature of our business and our sales model of supplying silver to industrial players, we have historically not allocated substantial resources for marketing and promotional activities. We employed six sales and marketing personnel as of June 30, 2012. Our sales and marketing team is responsible for preparing sales plans and making delivery arrangements. Our sales team, procurement team and production team generally meet at the end of each year to discuss the demand for silver ingot, the estimated annual sales volume and the preliminary sales plan for the following year. In addition, our sales team regularly engages in communications with customers and based on customers' feedback, the annual sales estimates and the current monthly sales volume, our sales team estimates sales volume and prepares sales plan for the following month. Our sales team, procurement team and production team normally meet every month to discuss the plan for the following month. Typically after the sales team decides on the sales plan, it works with the production department and the procurement department to arrange for raw materials purchase and production.

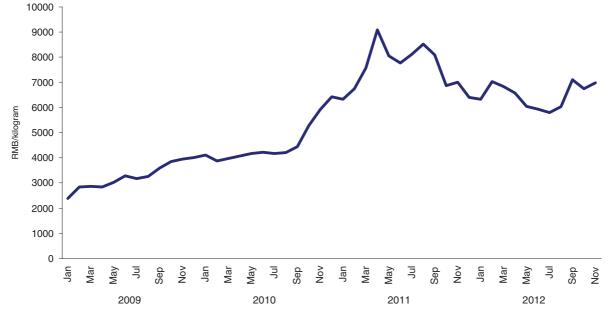
#### Sales contract terms

We generally enter into a sales contract with our customers every time when they place purchase orders with us and we do not have any long term purchase agreement or master purchase

agreement with our customers. A sales contract is either in our standard form or in the standard form of our major customers. The sales contracts typically provide for the product name, purity grade, quantity, method to determine price, settlement and payment terms, delivery terms and transportation arrangement. The purity grade for our silver ingots specified in the contracts is usually the China Silver Standard which requires a purity of not less than 99.99%. We generally do not require a minimum purchase amount in our sales contracts. The sales contracts normally require our customers to raise any quality concern within ten days after they receive the delivery. They can also invite an independent goods examination organization which is acceptable to us to conduct testing on our silver ingot. We did not encounter any quality disputes in the past, nor did we experience any product return during the Track Record Period.

#### **Pricing policy**

Silver ingot, lead ingot, bismuth ingot and antimony ingot are not subject to any price control prescribed by the PRC government. The sales price of our silver ingot is determined with reference to the closing China Domestic Silver Price on the day prior to the delivery of our silver ingots. The sales price of our lead ingot is determined with reference to the closing price of No. 1 Lead Ingot provided by the Shanghai Metals Market on the day prior to product delivery, after deduction of reasonable freight charges. In addition, the sales prices of our antimony ingot and bismuth ingot are determined with reference to the closing price and No. 1 Bismuth Ingot, respectively, provided by the Shanghai Metals Market on the day prior to the product delivery, after deduction of reasonable freight charges.





Source: CRU

The table above sets out the changes in the China Domestic Silver Price during the period from January 2009 to November 2012. To minimize the impact caused by the fluctuation of silver price in China, we plan to continue to enhance our production efficiency.

Based on the quantity of finished products we have produced at the end of each month, we calculate the number of days we take to produce a corresponding number of finished products in

inventory (from acceptance of delivery of raw materials to finished goods) in the next month, which we use to refer to our production lead time and measure our production efficiency. During the Track Record Period, our inventory of raw materials to support our continuous production was one to two months (our average turnover days of inventories were 50 to 80 days) and our production lead time (from acceptance of delivery of raw materials to sale of end products) was one to three months. As such, our typical total production cycle (from order of raw materials to sale of our end products) was two to four months.

After the Track Record Period and up to the Latest Practicable Date, because our production technologies became more developed and matured and our production workers became more proficient, we achieved to reduce our inventory of raw materials to a period of approximately one month and shorten our production lead time to approximately two to three weeks. As a result, our production cycle was reduced to a period of approximately one to two months. In addition to enhancing our existing production technologies and improving the efficiency of our production workers, we plan to continue to develop new advanced production technologies and techniques, for example, increasing high-voltage electric power to shorten electrolytic refining process and optimizing temperature and pressure to reduce time needed to separate antimony from anode slime alloy.

Our enhancement of production efficiency and reduction of inventory of raw materials during the Track Record Period did not affect our operations as we actively monitored and improved the production process as a whole at all levels, taking into account market conditions. It was also attributable to our improvement in production technologies and techniques, our efforts in technical adjustments and improvements, and the increased proficiency level of our production workers. As of the Latest Practicable Date, we have achieved our goal of a shortened production cycle.

Furthermore, as we gradually increase our production volume and maintain a high or full utilization of our designed monthly production capacity since June 2012, we believe we will be able to enhance the planning and organization of our production process as a whole such that production of a subsequent sub-process will not be affected or delayed by the preceding production sub-process of interim products. Based on our past experience in proactive management of our production processes, the fact that our production technologies become more developed and more matured, and other factors described above, we have achieved our new goal of shortened production cycle without affecting our operations.

We currently do not engage in any hedging arrangements to minimize our exposure to the fluctuation of silver prices or the fluctuation of other commodity metal price such as lead, bismuth or antimony because silver contracts only started to be traded on the Shanghai Futures Exchange as recently as May 2012. We plan to make such hedging arrangements in the foreseeable future to avoid being over-exposed to risk of price fluctuation. Please see "— Hedging Arrangements" in this section for further details.

The chart below sets forth the sales revenue, percentage of revenue, sales volume and the average selling price of each of our product categories for the year ended December 31, 2009, 2010 and 2011, and the six months ended June 30, 2011 and 2012:

	Year ended December 31,			Six months ended June 30,	
	2009	2010	2011	2011	2012
Silver ingot					
Revenue ( <i>RMB'000</i> )	255,992	402,518	719,448	314,564	468,522
Percentage of revenue	88.4%	6 72.0%	73.1%	69.4%	75.5%
Sales volume (tonnes)	88.7	104.7	112.9	49.7	86.0
Average selling price ( <i>RMB'000 per tonne</i> )	2,886.0	3,844.5	6,372.4	6,329.3	5,447.9
Lead ingot					
Revenue ( <i>RMB'000</i> )	29,375	104,444	137,060	69,961	84,459
Percentage of revenue	10.1%	6 18.7%	13.9%	15.4%	13.6%
Sales volume (tonnes)	2,559.0	7,749	9,997	4,898.8	6,491.7
Average selling price ( <i>RMB'000 per tonne</i> )	11.5	13.5	13.7	14.3	13.0
Bismuth ingot					
Revenue ( <i>RMB'000</i> )	_	12,983	68,856	36,668	38,023
Percentage of revenue		2.3%	7.0%	8.1%	6.1%
Sales volume (tonnes)		118.8	507.9	280.0	323.0
Average selling price ( <i>RMB'000 per tonne</i> )	_	109.3	135.6	131.0	117.7
Antimony ingot					
Revenue ( <i>RMB'000</i> )		22,628	40,473	21,262	23,865
Percentage of revenue		4.0%	4.1%	4.7%	3.8%
Sales volume (tonnes)		377.7	502.6	255.9	354.3
Average selling price ( <i>RMB'000 per tonne</i> )		59.9	80.5	83.1	67.4
Non-standard gold and others					
Revenue ( <i>RMB</i> '000)	4,360	16,718	18,335	11,008	6,006
Percentage of revenue	1.5%	3.0%	1.9%	2.4%	1.0%
Total revenue ( <i>RMB'000</i> )	289,727	559,291	984,172	453,463	620,875

# **Credit terms**

We generally require our customers to make a certain percentage of prepayment within one week after we sign the sales contracts with our customers. We deliver our goods generally within three days after we receive the prepayment. The percentage of prepayment for our silver ingot is between 70% to 90% of the purchase price, for lead or zinc oxide such prepayment is between 60% to 80% of the purchase price, and for bismuth ingot or antimony ingot such prepayment is between 60% to 70% of the purchase price. We generally grant a credit period of 30 days to our customers for the remaining balance of the purchase price and our customers generally settle such balance within seven to ten days after product delivery.

We normally estimate the total sales price for each sales order at the time of entering into the sales order after taking into account the price fluctuations at the relevant time, and the final sales price is determined on the delivery day by reference to the closing China Domestic Silver Price for our silver ingot and to the relevant commodity prices of No. 1 Lead Ingot, No. 1 Bismuth Ingot and No. 0 Antimony Ingot quoted by the Shanghai Metals Market one day prior to the

delivery day. Any difference between the prepayment and the final price is settled by the customers with us generally within seven to ten days after delivery.

Payments for our products are settled in RMB. We generally require our customers to pay in cash through bank transfer. As such, we only had a minimal amount of trade receivables during the Track Record Period. We did not have any bad debt and no provision for doubtful debt was made during the Track Record Period.

# **Delivery of goods**

We are responsible for the delivery of our silver ingots to customers, as well as the cost of delivery and transportation. We engage a third party security service company to transport our silver ingots secured in metal-insulated containers via a designated vehicle for delivery. Generally, there are four to five persons to safeguard each shipment, which include two drivers from the security service company, two security guards from the security service company and one person from our sales team. We have made such transportation arrangements without purchasing any transportation insurance or product insurance, as such insurance is neither generally available nor economically feasible in China. As a result, we are responsible for the risk of losses occurring during transportation until the silver ingots are delivered to our customers. We have not experienced any loss of goods during transportation for delivery in the past. We believe our current delivery arrangements with our customers are consistent with industry practice in China.

For our other products, customers arrange delivery and transportation as well as bear the risk of losses occurring during transportation. We are responsible for the transportation costs by deducting freight charges from the sales price. We believe that this arrangement enables us to respond promptly to changing market conditions and allows us to develop closer business relationships with our customers.

# **Our customers**

Over the years, we have established a strong customer base, which consists of 20 to 30 Chinese downstream manufacturers or metal trading companies, many of which are among the largest or leading enterprises in the end-user markets for silver products in China, across a diverse array of applications and usages of silver, such as in electronics and electrical applications, jewelry adornment, silverware and investment. Our major customers, with whom we have established good business relationships ranging from two to seven years, include China Minmetals Nonferrous Metals Co., Ltd. (五礦有色金屬股份有限公司), who is also our largest customer, China Nonferrous Metals Corporation National Import & Export Jiangxi Limited (中國有色金屬進出口江西有限公司) and Guilin Coninst Electrical & Electronic Material Co., Ltd. (桂林金格電工電子材料科技有限公司). China Minmetals Nonferrous Metals Co.. Ltd. (五礦有色金屬股份有限公司) and China National Nonferrous Metals Import & Export Jiangxi Corporation Limited (中國有色金屬進出口江西有限公司) are both leading state-owned resource enterprises in China's non-ferrous metal industry. Guilin Coninst Electrical & Electronic Material Co., Ltd. (桂林金格電工電子材料科技有限公司) is wholly-owned by China National Machinery Industry Corporation (中國機械工業集團有限公司), which is a large state-owned machinery manufacturer in China, and a Global 500 company.

With the expansion of our production capacity, we intend to develop business relationship with banks and financial institutions who are engaged in the trading of silver in international and domestic commodity and futures markets and have substantial demand for silver for hedging and investment purposes. Two of these banks and financial institutions have approached us with potential orders for a substantial quantity (over 100 tonnes per annum) of silver ingots in physical

delivery form. While we currently do not have the production capacity to meet the substantial quantity demanded by these banks and financial institutions, we plan to follow-up and develop our relationship with these banks and financial institutions as our production capacity expands in the future. We plan to commence negotiation for silver purchase with interested banks and financial institutions and enter into sales contracts with them when our production capacity increases to a sufficient level. We expect the commercial terms of such sales contracts to be similar to our current sales contracts with our existing customers in that we will require prepayments from these banks and financial institutions before making physical delivery of our silver ingots to them. We are in the process of adopting adequate risk management policies when undertaking new business relationships. Please see the section headed "Risk Factors — If any of our major customers as part of our business strategy, our business, financial condition, results of operations and prospects will be materially and adversely affected" in this prospectus for further information.

We have submitted the application to register our "Longtianyong" brand for silver trading settlement on the Shanghai Futures Exchange, which we expect to be approved by end of December 2012. The approval will increase our sales channels to commercial enterprises, including banks and financial institutions, and individual customers, who are engaged in trading of silver on the Shanghai Futures Exchange. During the Track Record Period, we did not participate in any futures transactions.

Our five largest customers accounted for approximately 75.7%, 66.3%, 68.1% and 71.3% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Sales to our largest customer accounted for approximately 42.7%, 31.9%, 30.4% and 24.3% of our total revenue for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

None of our Directors (or any person who, to the knowledge of our Directors, owns more than 5% of our issued share capital or any of our subsidiaries or any of their respective associates) had any interests in any of our five largest customers during the Track Record Period.

# PROCUREMENT

Our standard procurement primarily involves procurement of (i) principal raw materials, which are principally high-content ore powder, smelting slag and low-content ore powder, (ii) supplemental materials which we use to facilitate the production of silver and other products, and (iii) fuel, which include electricity and coal. Our purchase of principal raw materials accounted for a significant portion of our total cost of sales during the Track Record Period. We purchase principal raw materials from external suppliers, who are mainly refineries, mines and trading companies. We procure supplementary materials primarily from domestic chemical manufacturers and chemical trading companies. With respect to fuel, we procure electricity from a local electricity supply company and purchase coal primarily from a local supplier. In addition, we procure production equipment and machinery domestically from industrial manufacturers in China. We have not experienced any difficulty in procuring sufficient amounts of raw materials, supplementary materials or fuels in open markets, which meet our quality standards or at commercially acceptable prices.

Our five largest suppliers together accounted for approximately 51.5%, 71.1%, 55.1% and 55.5%, respectively, of our total cost of sales for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012. Our largest supplier accounted for approximately 12.9%, 18.3%, 14.8% and 19.4% respectively, of our total cost of sales for the same periods.

None of our Directors (or any person who, to the knowledge of our Directors, owns more than 5% of our issued share capital or any of our subsidiaries or any of their respective associates) had any interests in any of our five largest suppliers during the Track Record Period.

#### **Procurement of Raw Materials**

#### Principal raw materials

The principal raw materials which we use in production are high-content ore powder, smelting slag and low-content ore powder. The following table illustrates the total purchase amount, purchase volume and average purchase price of our principal raw materials for the periods indicated:

	Year ended December 31,			Six months ended June 30,	
	2009(1)	2010	2011	2011	2012
High-content ore powder					
Amount ( <i>RMB'000</i> )	65,677	228,978	388,972	195,519	258,178
Purchase volume (tonnes)	5,442	14,664	18,323	9,377	11,630
Average purchase price ( <i>RMB'000 per tonne</i> )	12.1	15.6	21.2	20.9	22.2
Smelting slag					
Amount ( <i>RMB'000</i> )	10,597	91,405	181,182	92,097	115,156
Purchase volume (tonnes)	843	6,572	9,456	4,755	6,181
Average purchase price ( <i>RMB'000 per tonne</i> )	12.6	13.9	19.2	19.4	18.6
Low-content ore powder					
Amount ( <i>RMB'000</i> )	30,371	101,541	166,091	83,053	93,250
Purchase volume (tonnes)	8,748	22,383	24,009	11,473	14,020
Average purchase price ( <i>RMB'000 per tonne</i> )	3.5	4.5	6.9	7.2	6.7
Anode slime <sup>(1)</sup>					
Amount ( <i>RMB'000</i> )	113,138	—	—	—	—
Purchase volume (tonnes)	304	_	—		_
Average purchase price ( <i>RMB'000 per tonne</i> )	372.2	—	—	—	—

(1) In 2009, we also carried out production at our old production plant which only had the capability of recovering and refining silver from anode slime. After 2009, we no longer purchased anode slime.

Since the silver content of our principal raw materials varies, we utilize a mixture of highcontent ore powder, smelting slag and low-content powder in the production of our silver ingots and other non-ferrous metals, which best matches our production and sales schedule. The average volume of our principal raw materials used to produce one tonne of silver ingot (the total purchase volume of high-content ore powder, smelting slag, low-content ore power and anode slime divided by total production volume) for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2011 and 2012 were approximately 173 tonnes, 418 tonnes, 459 tonnes, 455 tonnes and 383 tonnes, respectively.

#### Procurement of high-content ore powder, smelting slag and low-content ore powder

High-content ore powder, smelting slag and low-content ore powder are generally available in sufficient quantities and we have not experienced any shortage of supplies of the principal raw materials. We mainly source principal raw materials through refineries, mines and trading companies. We have maintained business relationships with approximately 20 to 30 suppliers, all of which are located in China. The history of our business dealings with our major suppliers ranges from three to four years.

Jiangxi Yiheyuan Industrial Company Limited (江西益合元實業有限公司) has been among our top suppliers of high-content ore powder and is an import and export trading company of nonferrous metals located in Jiangxi Province, approximately 200 kilometers from our current production plant. It has an annual sales revenue of approximately RMB500 million and sells products to approximately ten domestic customers. In addition, Hongxiang Industrial Development Company, Ltd. (丹東鴻祥實業發展有限公司), one of our major suppliers of high-content ore powder, is an integrated import and export trading company located in Liaoning Province, approximately 2,400 kilometers from our current production plant. It has an annual sales revenue of approximately RMB500 million and sells ore powder to approximately 30 domestic customers.

Hongda Lead-Zinc-Manganese Company, Ltd. (靈丘縣宏達鉛鋅錳業有限責任公司), one of our top suppliers of low-content ore powder, is a comprehensive mining and refining company in Shanxi Province. It operates a mine with an estimated mine life until 2040 and is located approximately 1,700 kilometers from our current production plant. It has an annual sales revenue of approximately RMB300 million and sells ore powder to three to four customers in China. Furthermore, Datong Jinyin Mining Company Limited of Shanxi Coal Transportation and Sales Group Co., Ltd. (山西煤炭運銷集團大同晉銀礦業有限公司), our other top supplier of smelting slag and anode slime in Shanxi Province, is located approximately 1,700 kilometers from our current production plant. It is a large state-owned enterprise which has mining, processing and smelting capacities for silver and other non-ferrous metals. It operates a mine with an estimated mine life until 2030. It has an annual sales revenue of approximately RMB160 million and sells products to over ten customers in China.

Our major suppliers engage third party service companies to transport their products. We source the raw materials from suppliers not only in Jiangxi Province but also in Shanxi, Liaoning and Hubei Provinces where there are abundant mineral resources with a large number of smelting companies nearby. As our suppliers transport and deliver raw materials to our current production plant, the proximity of suppliers has no material effect on our procurement arrangement with them.

Our procurement department makes an annual estimate of raw materials purchase based on the annual estimates of sales plan. They also meet our sales department and production department to make the procurement plan for the following month. During the Track Record Period, we generally maintained a sufficient inventory of raw materials to support our production for one to two months. After the Track Record Period and up to the Latest Practicable Date, we achieved to reduce our raw material inventory level to approximately one month. See the paragraph "— Sales and Marketing — Pricing Policy" in this section for further information.

The key factors which affect the price of high-content ore powder, smelting slag or lowcontent ore powder are the silver and lead contents in each specific shipment and the spot prices of silver and lead as quoted respectively by Shanghai White Platinum & Silver Exchange and the Shanghai Metals Market on the day prior to the delivery of the raw materials to us. Other factors affecting the prices of high-content ore powder, smelting slag and low-content ore powder include market conditions, overall demand and supply, and geographic locations of supplies.

The price of a particular shipment of high-content ore powder, smelting slag or low-content ore powder is determined by the content levels of silver and lead contained in the principal raw materials. The other types of minerals or metals contained in the raw materials are not taken into account when determining the price of the principal raw materials. After we receive a shipment of high-content ore powder, smelting slag or low-content ore powder, we collect samples from the shipment and conduct testing to determine the content levels of silver and lead contained in the

principal raw materials. Once the content levels are determined, the purchase price can be fixed by reference to (i) the mean of the China Domestic Silver Price for silver content, and (ii) the mean price of No. 1 Lead Ingot provided by the Shanghai Metals Market for lead content, in both cases, on the day prior to the delivery of raw materials to us, after applying 10 to 40% discount. The discount depends on the types of raw materials purchased, which is generally determined through negotiation.

# **Procurement terms**

We enter into a supply agreement with our suppliers each time we purchase high-content ore powder, smelting slag or low-content ore powder. We do not have any long-term contract or bulk purchase arrangement with our suppliers. Over the years we have consistently made timely payments to suppliers upon delivery of raw materials. We have established a well-recognized credibility among suppliers and mutually beneficial long-term relationships with them. We are able to procure raw materials from our suppliers on short notice and secure stable supply of raw materials for our production.

Under the supply agreements, we are generally required to make a down payment of 30% to 50% of the purchase price before delivery, with the balance settled within one month after delivery. The credit period of our purchases ranges from 20 to 30 days. Our suppliers are normally required to deliver the materials to us within two weeks following our down payment. They also make arrangements for the transportation and shipment of the raw materials to our production plant at their own costs, and they bear any risk of loss that may occur before raw materials are delivered to us.

#### **Procurement of Supplemental Materials**

We purchase supplemental materials, which are primarily lead oxide, caustic soda and liquid chlorine, to facilitate the manufacture of our products. We procure lead oxide, caustic soda and liquid chlorine primarily from domestic chemical manufacturers and chemical trading companies, all of which are Independent Third Parties.

# **Procurement of Fuel**

# **Electricity**

In addition, we have a self-owned generator with a capacity of 350 KW as a contingency power source. We did not experience any material electricity or power supply interruption during the Track Record Period.

# Coal

We burn coal in our furnaces for blasting and reverberating, which are essential stages of our production process. We source coal primarily from a local supplier. The supplier is responsible for the delivery of coal at its own cost. We generally pay the purchase price within one month after delivery.

#### **Procurement of Production Equipment and Machinery**

We procure recovery and refinery equipment and machinery for our production and our principal equipment includes reverberating furnaces, electrolytic plants, blast furnaces, refinery furnaces, decocting furnace, rotary kilns, rotary furnace, sintering machines, casting machines, and continuous casting and rolling lines. We purchase our equipment and machinery from domestic equipment suppliers, who also provide installation and testing services to us in connection with our purchase. We enter into agreements with the equipment and machinery suppliers, which set out specifications of the equipment, payment terms, warranty period, completion time, after-sales services and other terms.

We generally make milestone payments under each agreement, and the percentage of each milestone payment depends upon the nature of the installation project and individual purchase, as well as negotiations between us and our suppliers. The warranty period for our equipment and machinery is usually one year after installation.

# **INVENTORY CONTROL**

Our inventories consist of raw materials, work in progress and finished goods. We had inventories of RMB59.9 million, RMB128.1 million, RMB151.8 million and RMB127.9 million as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively.

Based on our annual estimates of raw materials purchase and monthly procurement plans, we manage inventories of raw materials at an appropriate level. During the Track Record Period, we kept in stock raw materials sufficient for one to two months' production to ensure our continuous operations. After the Track Record Period and up to the Latest Practicable Date, we reduced our raw material inventory level to approximately one month. We monitor the inventory level of our raw materials every day. Our inventories of raw materials amounted to RMB26.9 million, RMB47.6 million, RMB63.1 million and RMB63.5 million as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively.

With respect to our inventory of work in progress, we conduct stock take at the end of each month. We have installed metal detectors and implemented security measures to safeguard our inventory of work in progress. In addition to the monthly inventory count, each production unit of work in progress has three employees on patrol around its warehouse during each shift and our production plant is protected through 24-hour patrol by security guards. Our work in progress amounted to RMB23.8 million, RMB64.0 million, RMB71.5 million and RMB61.6 million as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively.

We maintained a minimal inventory of finished goods because we can usually sell our products within a very short period of time. Our inventories of finished goods amounted to RMB9.2 million, RMB16.5 million, RMB17.1 million and RMB2.8 million as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively.

Our finished goods are stored in a warehouse insulated with steel plates and we have designated security guards on patrol around the warehouse. Each silver ingot has an imprint of its weight on it and we have set up stringent procedures for goods delivery. Each delivery order can be made only after both the warehouse security guard and the responsible sales person have cross-checked the goods and authorized the dispatch with their signatures. We have not experienced any loss or embezzlement of silver ingots in the past.

Since most of our inventories, including silver ingot, lead ingot, bismuth ingot and antimony ingot are commodities readily tradable in the market and have short production cycles, we generally do not have any obsolete inventories.

#### **HEDGING ARRANGEMENTS**

We did not use any futures or options contracts to manage silver price risk during the Track Record Period as silver futures contracts only became available for trading on the Shanghai Futures Exchange, the only domestic exchange providing such services so far, in May 2012. Further, as our silver production, all of our customers and the scope of our business focus are currently based in China, we had not used any futures/options contracts available in other overseas stock exchanges. With an appropriate trading platform established in China which makes it more convenient now to administer such futures contracts, we plan to gradually implement our hedging strategy to effectively reduce the impact caused by fluctuation of silver market price on our results of operations after the Listing at a time when our annual production volume of silver ingots reaches a level of 400 tonnes or above by the end of 2013 or thereafter.

#### **Mitigation of Commodity Price Risk**

We plan to initially enter into hedging transactions on the Shanghai Futures Exchange to cover a reasonable portion of our monthly procurement of raw materials and to protect us against downward movements in the silver price during our production cycle. We opened a brokerage account in May 2012 with an experienced and knowledgeable PRC brokerage firm engaging in the commodity hedging business. As our current production cycle (from order of raw materials to sale of our end products) is approximately one to two months, we will consider entering into corresponding one- to two-month arrangements to manage the risks associated with downside movement in silver price until we sell relevant silver ingots to customers. We plan to enter into a corresponding futures contract on the Shanghai Futures Exchange to sell the contract at the same China Domestic Silver Price which was used to determine the price for the silver content contained in a batch of the raw materials we purchase. Our hedging will aim to lock in our profits and mitigate any potential loss or diminution of our profit margin. Any decision to trade futures contracts will need to be approved by our Hedging Committee as further described below.

The total RMB amount of futures contracts we may propose to sell will be subject to a limit of not more than 50% of our total purchase amount (total purchase quantity times unit purchase cost) of the individual batch of raw materials we purchase at the relevant time and such limits may only be extended by Board approval. No cut-loss limits will be set as any futures contracts that we trade will solely be for the purposes of fulfilling our hedging policy objectives and not for speculation purposes.

#### **Our Risk Monitoring System**

We plan to establish a hedging committee (the "Hedging Committee"), composed of our chief executive officer — Mr. Chen Wantian, our chief financial officer — Mr. Matthew Moy Yee Wo, the chief financial officer of Longtianyong Nonferrous Metals - Mr. Jiang Pengzhan, the procurement director and the sales director. We plan that members of the Hedging Committee will meet once every week to discuss our exposure level and the corresponding procurement and inventory management strategies based on the prevailing market condition, and our purchase and sales volumes. These members have considerable experience in financial management and business strategy. For example, our chief financial officer has over ten years of experience in various sectors of the financial industry including audit, corporate finance and asset management at an international accounting firm and international investment bank. When he worked at a Hong Kong based hedge fund, he performed financial analysis and managed investment portfolios. Furthermore, our chief executive officer has many years of experience in business management and strategic development. We also plan to establish a risk control department and will implement internal policies and rules to ensure our operation is not affected. We expect that our risk control department will consist of a supervisor, a designated employee as a trader who has sufficient experience and will implement sale or purchase orders, and a number of representatives from the procurement department, production department and sales department who will provide input regarding purchase prices of raw materials, corresponding production completion time and subsequent sale prices of silver ingot. We have identified a candidate, who is currently a department manager at a well-known futures trading company in China and has over 20 years of experience and expertise in relevant areas, for the position of supervisor for the department and we plan to employ the candidate in due course.

We are in the process of formulating relevant risk management measures. With the aid of available real time price monitoring systems, our risk control department will be responsible for reviewing and monitoring our risk exposure and for reporting their assessment to our management, our chief executive officer and our Hedging Committee. We contemplate that weekly meetings will be held and attended by our Hedging Committee to consider our risk exposure as well as to reach resolutions as to the sell price of our silver ingot and our hedging positions requirements. We envision that the Hedging Committee will decide how to implement and execute, if appropriate, the hedging transactions, basing their decision on our production plan and inventory of raw materials.

In addition, we plan to refer more frequently to various industry and financial publications for daily market information on business news, economic events and other factors that affect international silver prices. Our independent non-executive Director, Dr. Li Haitao has extensive experience in hedge funds and will assist the Board in relevant policy making and adjustment. See the section headed "Directors and Senior Management" in this prospectus for more details.

We will consider to retain an independent accountancy firm to audit our hedge trading and performance statements and review our internal control, inventory management and commodity risk management procedures for relevant periods, as part of our periodic financial audit after the Listing.

# **RESEARCH AND DEVELOPMENT**

As the purchase price of our raw materials is determined by the content levels of silver and lead contained in the raw materials, our ability to recover and refine other metals and minerals

which are commercially valuable will be the key driver to our future profitability growth. Our research and development activities focus on developing production technology and improving our ability to recover and refine other metals and minerals from smelting slag. We have owned or independently developed several advanced production techniques and processes in smelting and refining non-ferrous metals. We possess the proprietary know-how on selecting the most appropriate technique for different types of raw materials and for different stages of the silver production process. As of the Latest Practicable Date, we had not applied for patents in connection with some of the above advanced production technologies due to confidentiality concerns. We believe our proprietary know-how gives our business operations a competitive edge, and we further believe that the patent application process would expose our know-how and technologies to the public and thereby harm our business operations in our competitive industry.

On July 16, 2012, we obtained an approval from Ji An Municipal Science and Technology Bureau to accredit our technology and engineering center for smelting and deep processing of nonferrous metals as a research center at municipal level. In order to obtain such an accreditation, we are required to meet the prescribed standards for research facilities, research equipment and research personnel. The total gross floor area of our technology and engineering center is approximately 300 square meters. We plan to further improve our research and development facilities by purchasing additional research equipment and to apply to qualify our research center as a provincial-level research center in 2013.

Another focus point of our research and development activities is to develop new production technology for other metals, such as selenium, which we are currently not producing but have good commercial value and high market demand. In addition, we have recovered and refined gold through additional processing of raw materials since 2009 and have the relevant experience and production technologies and proprietary know-how for gold refinery. We plan to develop the hydrometallurgical extraction process to improve the recovery rate of gold and construct a production plant in the future. As of the Latest Practicable Date, we have not incurred any capital expenditure in relation to the gold production plant.

During the Track Record Period, we collaborated with well-established research institutions and universities in China to jointly develop new production technologies. All our research partners are Independent Third Parties. Normally after a new advanced production technology or technique is developed, we conduct small- and medium-scale testing and trial production. After all the financial measures and technical parameters are satisfactory, we deploy such a new production technology or technique in our commercial production. The following table sets forth the names of our research partners with whom we had collaborated to develop our production technologies and the respective contractual periods:

Production technologies involved	Name of partner	Commencement date	Termination date	Total expenditures incurred (up to October 31, 2012)
				(RMB'000)
Needle tellurium production	Jiangxi University of Science and Technology	January 20, 2011	January 19, 2013	8,000
Bismuth production	Jiangxi University of Science and Technology	January 19, 2010	January 18, 2012	3,000
Antimony ingot production	Jiangxi University of Science and Technology	April 8, 2009	April 7, 2011	1,700

All of such production technologies which are the subject of the agreements have been completed and are being applied to our production process. Under the research collaboration agreements with Jiangxi University of Science and Technology, we own the intellectual property rights of the technologies developed under these agreements.

We had incurred research and development expenses in the amount of RMB3.1 million, RMB5.7 million, RMB10.2 million, RMB5.2 million and RMB3.2 million for the year ended December 31, 2009, 2010, and 2011 and the six months ended June 30, 2011 and 2012, respectively. After the Track Record Period, we incurred research and development expenses of approximately RMB1.1 million for the four months ended October 31, 2012. We had no commitment for research and development as of October 31, 2012.

Our research and development department was formerly part of our research and quality control department. After the Function Delineation became effective on July 31, 2012, we established a separate research and development department which comprises three research divisions focused on pyrometallurgy, hydrometallurgy and new non-ferrous metals. Our separate research and development department is comprised of 21 full-time personnel, four of whom possess university-level or higher academic backgrounds, ten of whom possess over eight years of experience in research and development-related fields, seven of whom have over three years of experience in research and development-related fields, and four of whom have less than three years of experience in research and development-related fields. The research and development manager is Mr. Chen Beihai (陳北海), who holds a bachelor's degree in metallurgical engineering and has six years of experience in the research and development of the smelting of non-ferrous metals. To enhance our research and development capabilities in technological innovation and new product development, we intend to hire two to three metallurgical experts who have in-depth knowledge and extensive experience in non-ferrous metal mining and processing. We will place additional resources to our research and development department, recruit additional research and development staff, including engineers, and purchase additional advanced machinery and equipment.

# INTELLECTUAL PROPERTY RIGHTS

As of the Latest Practicable Date, we had registered eight trademarks in the PRC for our "Longtianyong" brand and had acquired one patent in respect of the production method of deep purification and titanium removal in copperas solutions from an Independent Third Party. We are in the process of applying for ten trademarks in respect of three product brands and two patents in the PRC in respect of the bismuth production method, and have received the relevant notifications from the State Intellectual Property Office of China with respect to our patent applications. Our PRC legal advisors, Jingtian & Gongcheng, have also advised us that the average processing time period for trademark applications is approximately 12 to 18 months and for patent applications is approximately 18 to 24 months. Details of our registered patent and applications are set out in "Appendix VI — Statutory and General Information — Intellectual Property Rights" to this prospectus.

During the Track Record Period, we did not have any knowledge of any counterfeiting of our products or infringement of our intellectual property rights by any third party which had a material effect on our business, nor have we knowingly violated or been subject to any claims relating to the intellectual property rights of any third party.

We have entered into confidentiality agreements with all employees who are working at the the research and development department, the quality control department, the environmental

protection and work safety department, and the accounting department, as well as employees who are at the associate-director level or above in the production department. Such employees may have access to materials relating to our proprietary know-how and production technology. If our employees decide to leave our employment, they are required to give us two months' advance notice period during which we separate them from any access to our confidential information. In addition, for two years after termination of their employment, our employees are not allowed to work for, or provide service to, any other company which compete or is likely to compete against our business. We believe such measures are sufficient to protect us as most of our employees do not have access to our proprietary know-how and production technology. We had a low employee turnover rate during the Track Record Period because of our competitive compensation and benefit packages. As of the Latest Practicable Date, we were not aware of any of our employees disclosing our intellectual properties which are material to our business to third parties in breach of their contractual obligations.

#### **COMPETITION**

# Silver Industry

The silver industry is highly fragmented in China. The total annual production volume of silver in China was 12,446 tonnes in 2011 and the top ten silver producers by production volume together produced 3,385 tonnes silver, which accounted for approximately 27.2% of China's total silver production in 2011. Since silver can be used in a variety of ways, e.g., as a trading commodity, an investment tool commonly used to hedge against inflation, in industrial and manufacturing applications, and in consumer products, there is a strong demand for silver products in China and as such our competitive strategy is to continue to focus primarily on the quality of our silver ingot. According to CRU, the total silver consumption in China is forecasted to continue growing from 12,893 tonnes in 2012 to 14,527 tonnes in 2016, representing a CAGR of 3.0% in the forecast period.

We are recognized as a leading silver producer in the PRC. In 2011, in terms of annual production volume, we were ranked as the tenth largest silver producer in China, according to CRU. Among the top ten silver producers, we believe Jiangxi Copper Corporation (江西銅業集團公司) ("Jiangxi Copper") is the only producer in Jiangxi Province whose silver production capacity and operation scale are comparable to ours; however, it mainly focuses on copper production with sales of its copper products contribute substantially to its total revenue. Two of the other top ten silver producers in China namely, Yuguang Gold & Lead Co. Ltd. (河南豫光金鉛股份有限公司) ("Henan Yuguang") and Chenzhou City Jingui Silver Industry Co., Ltd. (郴州市金貴銀業股份有限公司) ("Chenzhou Jingui") are engaged in metal smelting and processing, which are similar to our business. However, Henan Yuguang is mainly focused on productions of gold and lead with silver as one of the by-products, and Chenzhou Jingui's revenue contribution from silver ingots for 2011 is considerably lower than that of our Group. According to CRU, the other six top ten silver producers in China focus on upstream silver mining and ore production and thus do not directly compete with us in our silver production business.

According to CRU, there are three other silver producers in Jiangxi Province, each having a production capacity much smaller than ours and thus we do not consider them as our comparable competitors.

Therefore, we believe our comparable competitors are Jiangxi Copper, Henan Yuguang and Chenzhou Jingui, all of which are among the top ten silver producers in China and their profiles are set out below:

# Jiangxi Copper

Jiangxi Copper is a copper producer in China, and is listed on the Stock Exchange (Stock Code: 358). It is currently a copper producer and copper fabricator in China and also a supplier of gold, silver, selenium, tellurium, rhenium as well as sulphide chemicals products nationwide. Jiangxi Copper operates eight mines, three smelters, six copper fabrication companies, and three precious metal and rare earth metal producers. Silver is a by-product of Jiangxi Copper and it produced 526 tonnes of silver ingots in 2011.

The silver reserves of Jiangxi Copper's integrated mines (both domestic and overseas) were 9,823 tonnes by the end of 2010. Over 30% of Jiangxi Copper's raw materials are produced by its integrated mines. It also imports raw materials from overseas mines on a long term contract basis, which account for approximately 60% of its purchased raw materials annually. Imported ores are primarily from Australia, Brazil and Chile. The rest are from traders (approximately 20%) and the spot market (approximately 20%).

The pricing of Jiangxi Copper's silver ingot follows the Shanghai White Platinum & Silver Exchange's prices in the domestic market and the LBMA prices in the international market. Its silver ingot is also registered on the LBMA, the Shanghai White Platinum & Silver Exchange, and the Shanghai Futures Exchange. Jiangxi Copper's silver ingots have a purity grade of not less than 99.99%.

#### Henan Yuguang

Located in Jiyuan City, Henan Province, Henan Yuguang is principally engaged in the smelting and import and export trading of non-ferrous metals and other precious metals. It has the largest lead smelting production in China. Its main products include lead, gold, silver, copper and zinc oxide with the annual production volumes of 382,800 tonnes of lead, 3,470 tonnes of gold and 691 tonnes of silver in 2011. Its lead ingot and silver ingot are sold under the brand of "Yuguang", which has been registered with the LME and the LBMA, respectively, and are exported to overseas customers. Its silver ingots have a purity grade of not less than 99.99% and are also registered on the Shanghai Gold Exchange and the Shanghai Futures Exchange. The pricing of its silver ingot follows the Shanghai White Platinum & Silver Exchange's prices in the domestic market and the LBMA prices in the international market. Henan Yuguang is listed on the Shanghai Stock Exchange (Stock code: 600531).

Henan Yuguang's raw materials are primarily purchased via long term contracts with traders. Their use of silver content in imported materials accounts for over 70% of the total silver content in ores. They currently own the majority share of a mine in Gansu, which provides them with raw materials containing silver.

The pricing of their silver ingot follows the Shanghai White Platinum & Silver Exchange's prices in the domestic market and the LBMA prices in the international market. Henan Yuguang's silver is registered on the LBMA, the Shanghai Gold Exchange and the Shanghai Futures Exchange. Its silver ingots have a purity grade of not less than 99.99%.

#### Chenzhou Jingui

Chenzhou Jingui is a silver producer and exporter in China. It has a 100,000 tonnes "oxygen bottom-blowing" lead production line, a refined silver production line with an annual production capacity of 600 tonnes, a silver nitrate production line with an annual production capacity of 300 tonnes. In addition, it has an annual silver deep processing capacity of 1,000 tonnes. In 2011, Chenzhou Jingui produced 247 tonnes of silver.

Chenzhou Jingui purchases around two-thirds of its raw materials from local mines. Their pricing also follows the Shanghai White Platinum & Silver Exchange's prices in the domestic market and LBMA prices in the international market. Chenzhou Jingui's silver ingot is not registered on any of the above-mentioned exchanges. Its silver ingots have a purity grade of not less than 99.99%.

Over the years, we have established long-term relationships with our customers. Our management team has also established well-recognized credibility and a strong reputation. In addition, our Directors believe that, our self-developed and comprehensive recycling production process, advanced silver production technology and techniques, quality stability and customer base will allow us to maintain a sustainable development of our business. Furthermore, we have strong business relationships with our raw material suppliers and did not experience any shortage of raw material supply during the Track Record Period. As we have consistently made timely payments upon delivery of raw materials and have established a well-recognized credibility among suppliers, we are able to procure raw materials upon a short notice and secure a stable supply. Compared to our three comparable competitors, Jiangxi Copper, Henan Yuguang, and Chenzhou Jingui, our business is more focused on silver production in terms of the percentage of silver revenue contributing to the total revenue for the same period. For example, Jiangxi Copper mostly engages in copper production, Henan Yuguang mostly engages in the production of gold and lead, and Chenzhou Jingui's revenue contribution from silver ingot for 2011 is considerably lower than that of our Group. Our strong focus on silver production has enabled us to gain market recognition on our identity as a silver market player. We believe our high quality silver ingot as well as our wellestablished brand recognition have enabled, and will continue to enable, us to compete effectively with Jiangxi Copper, Henan Yuguang, and Chenzhou Jingui. Our environmental management system was certified to conform to GB/T 24001-2004/ISO 14001:2004 standard and we are one of the first companies in Jiangxi province to be certified as a "Circular Economy Examplar Enterprise" by the local authorities. All of these factors enable us to compete effectively in the silver industry.

#### Lead Industry

Competition in the Chinese lead market became fierce in recent years. This is due to the slow market growth rate and the large number of competitors. It is difficult for market players to gain competitive advantages as there is limited room to differentiate based on products and services.

#### **Antimony Industry**

The Chinese antimony production is concentrated in Hunan, which accounts for over 80% of the production in China. Minmetals Hsikwang Shan Twinkling Star Co., Ltd is the largest antimony producer in China. As mentioned in the "Industry Overview" section in this prospectus, the PRC governments has been controlling antimony supply and will continue to do so.

# **Bismuth Industry**

Most of China's bismuth producers are located in Hunan and Jiangxi Provinces, which account for over 60% and 15% of the country's total bismuth production, respectively.

### **ENVIRONMENTAL PROTECTION**

#### **Overview of Principal Environmental Regulations and Compliance Monitoring**

We are subject to PRC national environmental laws as well as regulations by local environmental protection authorities, including but not limited to the Environmental Protection Law, the Environmental Impact Evaluation Law of the PRC (中華人民共和國環境影響評價法), the Administrative Regulations on Environmental Protection of Construction Projects, the Law of the PRC on the Prevention and Control of Atmospheric Pollution, the Law of the PRC on the Prevention of Water Pollution and the Administrative Regulation on the Levy and Use of Discharge Fees (排污費徵收使用管理條例).

#### Environmental Assessments and Approvals on Our Production Facilities

We are subject to periodic inspections by local environmental protection authorities. According to relevant PRC environmental laws and regulations, the construction, renovation and expansion of all processing projects (for silver and other metals products) must comply with relevant aspects of the environmental impact assessment system. An environmental impact assessment of each project must be performed and an assessment report must be submitted to the relevant environmental protection authority for approval.

We have conducted assessments on the impact on the environment of the construction of our production facilities, formulated environment pollution prevention and remedial plans and obtained approval from the environmental protection authorities for such assessments.

On January 14, 2008, the Provincial EPD completed the environmental assessment and issued a notice approving our comprehensive recycling of metals from anode slime and circuit boards as complying with applicable environmental standards. On November 19, 2008, the Provincial EPD completed environmental assessment and issued a notice approving our production plant with annual designed production capacity of 20,000 tonnes for nanometer zinc oxide as complying with applicable environmental standards.

Furthermore, pursuant to the "Measures of Administration of Acceptance of Environmental Protection Facilities of Construction Projects" (建設項目竣工環境保護驗收管理辦法), following completion of the construction of our production facilities, we are required to apply for and obtain approval from the relevant local environmental protection authorities before we conduct trial production. We are also required to apply for the final inspection and acceptance of our environmental protection facilities by the relevant local environmental protection authorities within three months after the commencement of trial production.

In the event that the trial production exceeds three months and we did not apply for an extension of the trial production or for the final inspection and acceptance, the relevant environmental protection authorities may require us to make application within a prescribed time period, and upon any failure to do so, issue an order to us to suspend the trial production and impose a fine up to RMB50,000 on us. In addition, pursuant to the Measures under the Reply of State Bureau of Environmental Protection regarding Administrative Penalties on Illegal

Misconducts during Trial Production (國家環境保護總局關於企業試生產期間違法行為行政處罰意見的復函), in the event that the trial production after an extension exceeds one year and we did not apply for the final inspection and acceptance, the relevant environmental protection authorities may deem us to have ended the trial production and started the normal production, issue an order to us to suspend the normal production and impose a fine up to RMB100,000 on us.

Normal production activities may not begin until a project has been inspected and approved by the relevant environmental protection authority. Any failure to comply with such laws and regulations may result in the relevant environmental protection authority issuing orders to suspend production and implement measures to rectify the non-compliance, and the responsible entity may be fined up to RMB100,000.

Following completion of the construction of our existing production facilities, we applied to the City EPB for an approval of our trial production. On December 28, 2008, the City EPB issued a notice approving our trial production in respect of zinc oxide production process and electrolytic recovery of metal production process. Our PRC legal advisors, Jingtian & Gongcheng, confirms that the City EPB is a competent authority to issue the notice approving our trial production. We commenced the trial production on January 2, 2009 pursuant to the notice of approval. After approximately two months' trial production, we voluntarily suspended our trial production for the technical improvement and adjustment of our production plant and environmental protection facilities.

Thereafter, we applied to the City EPB for an extension of our trial production. On September 28, 2009, the City EPB issued a notice approving the extension of our trial production. On January 5, 2010, we applied to the Provincial EPD for the final inspection and acceptance of our production processes and relevant environmental protection facilities. On November 26 and December 29, 2010, the Provincial EPD issued the notices approving the final inspection and acceptance of our environmental protection facilities with respect to our zinc oxide production process and our electrolytic recovery of metal production process, respectively.

Although we have not fully complied with the timeline requirements as stipulated by the "Measures of Administration of Acceptance of Environmental Protection Facilities of Construction Projects", Jingtian & Gongcheng, our PRC legal advisors, are of the view that we had not been and are unlikely to be subject to any administrative punishment by the relevant competent authorities because (i) the City EPB approved the extension of our trial production up to one year from our initial trial production commencement date, (ii) the Provincial EPD approved the final inspection and acceptance of our environmental protection facilities, (iii) the above two environmental protection authorities never questioned the prescribed time period of our trial production, and (iv) according to the confirmation dated December 7, 2012, the County EPB have confirmed that we had never been imposed with any administrative punishment due to environmental protection issues. Our PRC legal advisors, Jingtian & Gongcheng, advised us that the maximum amount of penalties which could be imposed on us due to the non-compliances of the timeline requirements with respect to applying for the extension of our trial production and the final inspection and acceptance of our production processes could be up to RMB150,000.

Furthermore, our PRC legal advisors, Jingtian & Gongcheng, advised us that, pursuant to the Measures of Administration of Acceptance of Environmental Protection Facilities of Construction Projects, the competent authority to approve the final inspection and acceptance of our environmental protection facilities is the Provincial EPD.

Since the Provincial EPD is the competent authority to issue the approvals, our PRC advisors, Jingtian & Gongcheng, are of the view that the notices issued by the Provincial EPD in November and December 2010 are unlikely to be challenged or revoked by any higher authority.

#### **Environmental Inspections and Monitoring**

After we had obtained the acceptance notices from the Provincial EPD for our production plant, as part of the inspection and monitoring of our environmental compliance during the period from 2009 to 2011, the City Monitoring Station and the County EPB (by commissioning third party agents) collected and compiled samples of exhaust emission twice a year within our production site and samples of ground water, soil, noise and domestic wastewater, respectively, at various locations around our production site once a year. After we had installed detectors on two chimneys during our trial production and subsequently connected them online with the government network in the third quarter of 2011 in accordance with the relevant environmental protection requirements, the local environmental protection authorities have monitored our exhaust emission through such online detectors on a real time basis in accordance with relevant national and local environmental requirements and standards. They analyzed all the samples to assess our compliance with national and local environmental requirements and standards.

Furthermore, in accordance with the Measures for the Administration of Environmental Monitoring (環境監測管理辦法) and the Environmental Monitoring Reporting System (環境監測報告 制度), the City Monitoring Station and the County EPB have also regularly reported their monitoring data to the higher-level environmental protection authorities, namely the City EPB and the Provincial EPD. According to the confirmation letters from the County EPB dated September 13, 2012 and December 7, 2012, respectively, the discharge and environmental management of wastewater, exhaust emission and solid waste from our production, which have been regularly inspected and monitored by the City Monitoring Station and County EPB, have complied with the applicable environmental requirements and standards under the PRC laws and regulations.

#### The 2012 National List of Key Environmental Monitored Enterprises

On December 31, 2011, the MEP issued to environmental protection departments and bureaus at all levels in China the list of national key monitored enterprises for year 2012 (2012國家重點監控企業名單) (the "2012 National List"). MEP promulgated the list of national key monitored enterprises in previous years for environmental monitoring and added non-ferrous metal smelting companies to the list starting in 2012. The main purpose of the 2012 National List is to strengthen governmental supervision and monitoring of the key pollution sources and to achieve the broader policy goals of energy conservation and emission reduction in the current national Five-Year Plan. Implementation of the 2012 National List is part of the MEP's standard plan and normal procedure for environmental monitoring of representative enterprises under the broader policy goals of the Five Year Plan and does not necessarily indicate that any enterprise on the 2012 National List is producing emission or waste discharge in the environment in excess of the levels permitted by laws. Jingtian & Gongcheng, our PRC legal advisors, have also advised that there is no additional legal consequence simply because they are selected as national key monitored enterprises if any enterprises breach the environmental rules and regulations.

We were selected as one of the 3,605 national key monitored enterprises for exhaust emission and were included in the 2012 National List. A total of 81 enterprises in Jiangxi Province were selected and included in the 2012 National List. Pursuant to the Selection Principle and

Method for the National Key Monitored Enterprises in 2012 (2012年國家重點監控企業篩選原則和方法) issued by MEP on December 31, 2011, local environmental protection bureaus rank the cumulative amounts of exhaust emission generated (before treatment) and exhaust emission released (after treatment), respectively, in respect of sulfur dioxide, nitrogen oxides or dust for relevant enterprises within certain city, district or region. When a company's cumulative amount of exhaust emission generated in respect of sulfur dioxide, nitrogen oxides or dust is ranked among top 50% in the non-ferrous metal smelting enterprises with comparable operation scales in Ji An City, or its cumulative amount of exhaust emission released in respect of sulfur dioxide, nitrogen oxides or dust is ranked among top 65% of such enterprises, such company is selected as a national key monitored enterprise. According to the County EPB, we were selected as a national key monitored enterprise for exhaust emission and were included in the 2012 National List, because based on the environmental monitoring data in 2011 and the ranking of our cumulative amount of exhaust emission released in respect of sulfur dioxide among the non-ferrous metal smelting enterprises with comparable operation scales in Ji An City, we met the selection criteria. Apart from us, other major smelting and refining enterprises in Jiangxi Province were also selected and included in the 2012 National List.

In addition to monitoring our exhaust emissions on a real time basis through the online detectors installed on our chimneys, with effect from January 2012, the Provincial EPD has designated the City Monitoring Station, which has qualifications relevant to environmental protection monitoring as recognized by the MEP, to monitor the exhaust emission from our production site and collect soil and water samples from proximate areas of our production site more frequently on a quarterly basis, in accordance with the national and local environmental requirements and standards. After collection and analysis, the City EPB then transmits such data to a centralized MEP database for national key monitored enterprises. The City Monitoring Station has implemented more stringent monitoring and reporting procedures on us and carried out a total of approximately five examinations in 2012 (including three quarterly examinations at no cost and two additional examinations at a total cost of RMB30,000 per our voluntary requests). Since such implementation in January 2012, we have fully complied with relevant requirements and standards under the national and local environment protection laws and regulations and our business operation has not been affected. In addition, our sulfur dioxide discharge has consistently met the applicable discharge standards and the gross control index issued by the City EPB since we started our production.

#### Longtianyong Nonferrous Metals Does Not Belong to the Lead-acid Battery and Recycled Lead Industries

The MEP issued a Notice on Preventing Pollution from the Lead-Acid Battery and Recycled Lead Industries (the "Notice") on May 18, 2012. Pursuant to the confirmation letter issued by the County EPB dated September 12, 2012, Longtianyong Nonferrous Metals does not belong to the lead-acid battery and recycled lead industries mentioned in the Notice and therefore is not subject to the relevant environmental rules and regulations set out in the Notice.

### Pollutant Discharge Levels and Fees

We are required to apply for registration with relevant environmental protection authorities for discharge of pollutants and pollutant discharge permits, and pay pollutant discharge fees. National regulations promulgated by the PRC government set forth discharge standards for emissions into the air and water. National environmental protection enforcement authorities also promulgate discharge fees for various waste substances. The discharge fee usually increases for each incremental increase of amount of discharge up to a specified level set by the national or

local regulatory authorities. For any discharge above the specified level, the relevant PRC government may order our facilities to rectify behavior causing environmental damage, and the local government has authority to order any of our facilities to close for failure to comply with existing regulations.

During the Track Record Period and up to the Latest Practicable Date, we had fully complied with the requirements pertaining to the registration with relevant environmental protection authorities for discharge of pollutants and pollutant discharge permits and the payment of pollutant discharge fees.

#### Pollutant discharge levels

According to the Approval of Environmental Impact Assessment issued by the Provincial EPD for our Company's production projects in 2008, (i) the applicable discharge standards GB16297-1996 (大氣污染物綜合排放標准) and of air pollutants are GB18484-2001 (危險廢物焚燒污染控制標准), which provide that the maximum permitted discharge concentration of sulfur dioxide and dust is 400mg/m<sup>3</sup> and 80mg/m<sup>3</sup>, respectively; (ii) the applicable discharge standards of water pollutants is GB 8978-1996 (污水綜合排放標準), which provides that the maximum permitted discharge concentration of chemical oxygen demand (measurement of our domestic wastewater discharge) ("COD") is 100mg/L; (iii) the discharge amount of sulfur dioxide and COD shall satisfy the gross control index for the emission of sulfur dioxide and COD issued by the City EPB, which is no more than 157 tonnes and 0.69 tonnes per year.

Since October 1, 2010, the aforementioned applicable discharge standards of air pollutant changed to GB25466-2010 (鉛、鋅工業污染物排放標准) and GB18484-2001, which provide the same maximum permitted discharge concentration of sulfur dioxide and dust, and the gross control index for the emission of sulfur dioxide also remains the same.

The table below sets out the information regarding the actual discharge concentration of the major pollutants from our production and the related maximum permitted discharge concentration under the discharge standards:

Major Pollutant	Actual Discharge Concentration <sup>(1)</sup>	Maximum Permitted Discharge Concentration	Applicable Discharge Standards <sup>(2)</sup>
Sulfur Dioxide	50-200 mg/ m <sup>3</sup>	400mg/ m <sup>3</sup>	<ul> <li>GB16297-1996 and GB18484-2001 (before Oct. 1, 2010)</li> <li>GB25466-2010 and GB18484-2001(after Oct.1, 2010)</li> </ul>
Dust	30-70 mg/ m <sup>3</sup>	80mg/ m <sup>3</sup>	<ul> <li>GB16297-1996 and GB18484-2001 (before Oct. 1, 2010)</li> <li>GB25466-2010 and GB18484- 2001(after Oct. 1, 2010)</li> </ul>
COD	60-90 mg/L	100mg/L	• GB 8978-1996

(1) Source: The monitoring reports issued by the City Monitoring Station.

(2) Source: The Approval of Environmental Impact Assessment issued by the Provincial EPD for our production projects in 2008 and the monitoring report issued by the City Monitoring Station.

Our discharge of air emissions has not exceeded the aforementioned standards and gross control index according to the monitoring data during the Track Record Period. According to our exhaust emission data which the County EPB and the City Monitoring Station monitored on a real

time basis and regularly reported to the higher-level environmental protection authorities, our sulfur dioxide emission was from 50 to 200mg/m<sup>3</sup> during the Track Record Period. According to the confirmation letter from the County EPB dated October 2, 2012, we set out in the table below the respective discharge levels of sulfur dioxide and COD by our Group during the Track Record Period:

	Actual Discharge Level (tonnes)			e Level (tonnes)	Maximum discharge amount sets out in the
	For the year ended December 31,			For the six months ended June 30,	gross control index issued by the City EPB
Major Pollutant	2009	2010	2011	2012	(tonnes per year)
Sulfur DioxideCOD		1710	18.1 0.15	9 0.08	No more than 157 No more than 0.69

Note: Maximum discharge amount with respect to dust was not set out in the gross control index issued by the City EPB.

According to the confirmation letter from the County EPB dated December 7, 2012, the discharge and environmental management of wastewater, exhaust emission and solid waste from our production have complied with the applicable environmental protection requirements and standards under the PRC laws and regulations since our incorporation.

#### Pollutant discharge fees

Pursuant to the Administrative Measures for the Levy Standard of Pollutant Discharge Fees (排污費征收標准管理辦法) implemented on July 1, 2003, pollutant discharge fee for air and water emissions is calculated based on the category and quantity of pollutants (which is expressed in terms of pollution equivalent as calculated under such measures). The applicable fee standard under such measures specifically for the discharge of sulfur dioxide is RMB0.6 per pollution equivalent since July 1, 2005, and the fee standard for the discharge of dust and COD is RMB0.6 and RMB0.7 per pollution equivalent, respectively.

When we relocated our production plant to the Western Industrial Park of Yongfeng County, Jiangxi Province in 2009, we were granted a waiver of our pollutant discharge fees for three years commencing from October 2009 upon commencement of our production there. This arrangement was reached pursuant to an agreement between the Management Committee of Industrial Park of Yongfeng County (永豐縣工業園管委會) (the "Management Committee") and us on April 20, 2007, which served as an incentive for our commencement of operations in the Western Industrial Park of Yongfeng County. Pursuant to the Measures for Implementation of Management of Preferential Collection of Fee in Ji An Municipal Industrial Park (吉安市工業園區規費優惠徵收管理實施辦法 the "Preferential Measures") which was revised by the People's Government of Ji An City on February 26, 2005 and abolished on April 2, 2008, any enterprises located and conducted business in the Yongfeng County Industrial Park could be exempted from certain administrative fees except for the fees payable for industrial land collected by authorities at or above the municipal level. Our PRC legal advisors, Jingtian & Gongcheng advised us that the enforceability of the agreement between us and the Management Committee has not been affected by the abolishment of the Preferential Measures. In addition, Jingtian & Gongcheng advised us that the pollutant discharge fee belongs to the administrative fee items mentioned in the Preferential Measures under the Reply of State Bureau of Environmental Protection on the Nature of Pollutant Discharge Fee and other Related Issues (國家環境保護總局關於排污費性質等有關問題的覆函).

Furthermore, according to the undertaking letter from the Management Committee dated October 29, 2012, the Management Committee undertook to fully reimburse us any losses in the

event that the competent authorities question or invalidate the Preferential Measures or the agreement and require us to repay for the waived pollutant discharge fees.

According to the confirmation letter from the County EPB dated October 2, 2012, based on the discharge levels of the major pollutants of sulfur dioxide, dust and COD during the Track Record Period, the pollutant discharge fee would have been approximately RMB136,310, RMB139,330 and RMB138,490 for the year ended December 31, 2009, 2010 and 2011, respectively, if the exemption were not granted; the pollutant discharge fee was approximately RMB68,410 for the six-month ended June 30, 2012; and the pollutant discharge fee is estimated to be approximately RMB136,000 for the year ending December 31, 2012. After the expiration of the waiver period, the County EPB will determine the amount of pollutant discharge fees payable by us each year according to the quantity of pollutants we discharge.

### **Our Environmental Protection Measures**

#### **Our Environmental Management System**

We generate dust, sulfur dioxide, wastewater and noise during our production processes. We have improved our energy efficiency by applying new production techniques and technologies for our production process. See the paragraph headed "— Our Products — By-Products" in this section for further discussion on how we utilize and sell the by-products from our manufacturing process. To minimize the impact of such production emission, mainly sulfur dioxide, on the environment, we have implemented a set of environmental protection measures and installed equipment to process and dispose of our industrial wastes pursuant to the requirements under the relevant PRC laws and regulations. After we have obtained or developed a new environmental protection technology, we make technical adjustment on the new environmental facilities. We replace old environmental facilities with new ones for production only when local environmental protection authorities have completed final inspection and acceptance in accordance with national and local environmental requirements and standards.

Air Emission: We generate dust and sulfur dioxide in our production process. We have installed dedusting equipment using a water-film technique and bag filters for collection and removal of dust. The production emission, after being dedusted, is disseminated through a chimney into the air. As required by the relevant local environmental protection authorities, we had installed detectors on two chimneys during our trial production before we applied for the final inspection and acceptance of our environmental protection facilities. Our detectors were subsequently connected online with the government network at the request of local environmental protection authorities in the third quarter of 2011. Local environmental authorities have used the online detectors to monitor our exhaust emission on a real time basis in accordance with national and local environmental standards.

Furthermore, we have future plans to enhance the treatment and recovery of sulfur dioxide; specifically, we plan to adopt the sodium sulfide-sulfur process, an advanced desulfurization treatment method to treat sulfur dioxide. After such treatment, sulfur dioxide is converted into sulfur products which have good commercial value and are widely used in various industries and in high demand in China. The sodium sulfide-sulfur process was not implemented during the Track Record Period because our production volume and operation scale had not yet reached such a level at which it was economically viable to implement such a process. As we continue to increase our production capacity, we therefore plan to enhance our capabilities of treating sulfur

dioxide and upgrade our environmental protection system. We expect this improvement and upgrade of our environmental protection system for exhaust emission to cost approximately RMB50 million (with costs mainly deriving from the purchase of patented technologies and necessary equipment) and be completed by 2014.

Water: To minimize any environmental impact of our production process, all industrial process wastewater from our production is directed into a detention pond located within our production facilities for detention and sedimentation, and subsequently reused in our production process. To prevent wastewater in our detention pond to contaminate soil underneath, the pond is constructed with two layers of concrete with a plastic liner in between and a rubber liner laid along the bank and the bed of the pond. We also collect rain water which is recycled to cool down dust and sulfur dioxide to reduce any environmental impact of our production process.

The domestic wastewater from production workers' shower room is directed into a detention pond located within our production facilities and then reused in our production process. We have used a biochemical process to treat other domestic wastewater from kitchen and office buildings before discharging it into the discharge system of Western Industrial Park of Yongfeng County. The County EPB has used COD to measure the discharge level of our domestic wastewater.

- Slag: The main solid waste generated from our production is slag, which is stored in our warehouse for further processing. To further recover non-ferrous metals in the slag, we recycle it back to our production process using rotary kiln, blast furnace or reveberatory furnace. We then process any remaining kiln slag into saleable concrete for construction use.
- Noise: We have only procured production equipment which generates low level of noise and also installed noise-reduction equipment to control and reduce noise generated during our daily operations.

For the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, our total capital expenditure for environmental protection equipment and system was approximately RMB12.2 million. During the same period, our cost of implementing environmental protection measures and compliance with applicable environmental laws and regulations was approximately RMB80,000, RMB310,000, RMB520,000 and RMB360,000, respectively.

On March 19, 2012, Longtianyong Nonferrous Metals was certified by Hebei Yingbo that its environmental management system conforms to GB/T 24001-2004/ISO 14001:2004 standard with respect to its environmental management activities in relation to the production of silver, lead and zinc oxide series products. To obtain such certification, we have established policies, objectives, procedures and programs, and implemented and maintained requisite human resources, organizational structure and financial and technological resources for our compliance with relevant legal and other requirements, continual improvement of our environmental management system, and prevention of pollution. We have monitored and measured key parameters of operations, ensured competency and experience of employees and provided appropriate training to them. Our management periodically evaluates our compliance with applicable legal requirements and the adequacy and effectiveness of our system. The certification is effective through March 18, 2015.

# **Our Environmental Protection and Work Safety Department**

In addition to our environmental protection physical infrastructure, we also have staff who work on maintaining and improving environmental protection measures. Our environmental protection and work safety department was formerly part of our research and quality control department. After the Function Delineation became effective on July 31, 2012, we established a separate environmental protection and work safety department consisting of four full-time employees to focus on such functions. All of them have obtained vocational training and college education, and majored in environmental engineering or chemical engineering. Of these four personnel, two possess university level or higher academic backgrounds, one has ten years of experience in environmental protection and safety-related fields, one has over three years of experience in environmental protection and safety-related fields, and two have fewer than three years of experience in environmental protection and safety-related fields. Mr. Chen Yanbiao (陳岩標), one of these four personnel and the manager of this department, has ten years' experience specifically in environmental safety-related work and management. Mr. Song Guosheng, the head of our general production, leads our environmental protection and work safety department and has about ten years of experience in environmental protection in production. In each of our production units, the head of the production unit is also responsible for supervising the environmental management activities. We have organized induction trainings for our production staff. Our environmental protection and work safety department provides weekly trainings for our managerial staff at the associate-director level or above in the production department, each of whom conducts monthly trainings for all group leaders under supervision. Each group leader always briefs all team members before each production shift starts on environmental protection and work safety-related matters. The environmental protection and work safety department is responsible for overseeing environmental protection of our Group as a whole including the following:

- formulate environment-related guidelines and policies for our Group based on applicable environmental laws, regulations and standards;
- check regularly the latest development in environment-related laws, regulations and standards in China, to ensure our internal environmental protection guidelines and polices are up-to-date;
- inspect our production facilities and environmental protection facilities on a regular basis to ensure our compliance with relevant national and local environmental requirements and standards;
- handle applications for environmental protection approvals and inspections and any other necessary filings for our construction projects;
- regularly liaise with relevant governmental environmental protection authorities; and
- formulate contingency plans for any environment-related emergency and handle such emergency.

# **Our Monitoring System of Environmental Compliance**

Our management has formulated environment management policy for our Group based on applicable environmental laws, regulations and standards and environmental facilities inspection policy. Our environmental protection and work safety department is responsible for designing and

reviewing our environmental protection management systems and internal control measures with respect to environmental compliance to ensure the effectiveness and reliability of our environmental management systems and our compliance with environmental laws and regulations. They regularly inspect our environmental protection facilities on a regular schedule in three eighthour shifts to ensure our compliance in accordance with the policies. Immediately upon finding any non-compliance of relevant environmental requirements and standards, they directly raise it to the responsible production director. If the production director does not rectify the non-compliance promptly, our environmental protection and work safety department will report directly to Mr. Song Guosheng, the head of our general production, who will request the responsible production director to take all corrective actions immediately. If the production director fails to do so, Mr. Song will communicate with the director in person and we will impose a fine on the director's salary income. If such failure persists twice, the director will be terminated from employment as we take any non-compliance seriously. During the Track Record Period and up to the Latest Practicable Date, we had not experienced any non-compliance from our production directors under such circumstances. In addition, our environmental protection and work safety department meets with all production directors at weekly production meetings to report the monitoring results of implementation of environmental compliance measures.

Our Directors are of the view that the enhanced internal control measures with respect to environmental compliance are adequate and effective under Rule 3A.15(5) of the Hong Kong Listing Rules. After having made reasonable due diligence inquiries, reviewed the measures and policies we have adopted to enhance our monitoring systems of environmental compliance, and discussed with our management on the progress of implementing measures, the Sole Sponsor concurs with our Director's view.

We expect that our annual cost to be incurred for compliance with applicable environmental laws and regulations (including the implementation of measures recommended by Atkins China) will be approximately RMB990,000 and RMB1,260,000 for the year ending December 31, 2012 and 2013, respectively.

### Environmental Due Diligence Assessment by Atkins China

We voluntarily engaged Atkins China in July 2012 to undertake a Limited Phase I Environmental Due Diligence Assessment for our production facilities and to provide an environmental due diligence report on their findings. The purpose of the engagement is to assist us in identifying any issue in our environmental management system and determining the areas we need to work on to strengthen our environmental protection measures. Atkins is a multi-disciplinary, multi-national business offering a unique portfolio of services, ranging from planning and designing to facilities management, infrastructure maintenance and management. It regularly undertakes Limited Phase I Environmental Due Diligence Assessments for clients across Hong Kong and Mainland China, and hundreds of projects throughout the world. The due diligence services which Atkins normally provides include (i) commercial and industrial development; (ii) mergers and acquisition transactions; (iii) plant closure and land sales; (iv) application for change in land use; and (v) brownfield site assessment and remediation.

A Limited Phase I Environmental Due Diligence Assessment was undertaken by Atkins China in accordance with the following standards:

• ASTM International Standard E1528-00, "Standard Practice for Environmental Site Assessments: Transaction Screen Process";

- ASTM International Standard E1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process"; and
- ASTM International E1528-06 "Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process".

The above standards are commonly adopted in the environmental protection industry and adapted for use in China. They define good commercial and customary practice for conducting assessments of a property with respect to contamination and provide standards for identification of recognized environmental conditions such as the presence or likely presence of any contamination on a property under conditions that indicate an existing release, a past release, or a material threat of release of contamination into structures on the property or into the ground, ground water or surface water.

As part of their work, Atkins China visited our production plant, visually inspected our premises, and perimeter area for any visible and potentially negative environmental condition, including soil, groundwater or surface water. Atkins China reviewed documentation on previous and current land uses of our production site, and interviewed our senior management regarding history of the property, on-site activities and adjacent land uses. Atkins China also reviewed monitoring data and records and interviewed the County EPB with regard to the environmental performance of our production facilities at Western Industrial Park of Yongfeng County. Based on discussions with the County EPB, Atkins China found that: (i) air emissions and domestic wastewater at our production plant and soil and groundwater at selected areas surrounding the site are routinely monitored by the County EPB and the City EPB; (ii) the County EPB have confirmed that our production facilities comply with the environmental criteria accepted by them; and (iii) there have not been any recorded environmental non-compliances at our facility or any formal environmental citations issued to us or punishments imposed on us by the County EPB or City EPB.

Atkins China did not take any independent collection or laboratory analysis of air emissions, soil, groundwater or surface water samples nor did they visit the greater area or people within close proximity of our production facilities. Sample results for air quality and wastewater discharge were provided by the local environmental protection authorities and were reviewed by Atkins China with regard to the parameters tested and the legislative requirements that are applied to the project by the local authorities. Atkins China did not collect independent samples of exhaust emissions, soil, ground water or surface water, but have reviewed the sample results provided by the City Monitoring Station and the County EPB, as the local environmental protection authorities are independent from us and has undertaken the routine monitoring procedures in accordance with relevant PRC laws and regulations.

Atkins China made certain recommendations to further enhance our environmental protection measures in accordance with industry best practice. We have accepted Atkins China's recommendations and are implementing, and will continue to carry out, improvements to our production facilities in order to further enhance our environmental protection and management systems as we expand our production facilities in the near future, including: (i) engaging the City Monitoring Station to carry out monitoring and sample testing of the soil and groundwater within our production site twice every year (with an estimated cost of RMB30,000 at our voluntary requests and the implementation has commenced since September 2012 and will continue on an ongoing basis) in addition to their quarterly monitoring and sample testing of the soil and groundwater at selected areas surrounding our production site (with no cost incurred by us);

(ii) monitoring the air, soil, surface water and groundwater conditions within and surrounding the production site by our four-personnel environmental protection and work safety department on a regular basis (with an estimated cost of RMB1,000,000 mainly to purchase the monitoring equipment and the implementation is being carried out and will be effective before the Listing); (iii) implementing an inspection system to track any damage or wear and tear to the fixtures and facilities at our production site for regular maintenance (with most of the costs being equipment maintenance fees and the implementation has commenced and will continue on an ongoing basis); and (iv) further improvement of our drainage system and management of our solid waste (with an estimated cost of RMB20,000 and the implementation has commenced and will continue on an ongoing basis).

During Atkins China's visit to our production site, Atkins China has identified a number of areas for pollution control improvement and we have taken on these improvement measures as set out above. With these measures in place and implemented during the operation of our production facilities, Atkins China considers that reasonable measures have been undertaken to comply with the statutory pollution control requirements.

Furthermore, as confirmed by Jingtian & Gongcheng, our PRC legal advisors, during the Track Record Period and up to the Latest Practicable Date, there was no mandatory requirement under the PRC laws and regulations for the collection and testing of soil sample by the enterprise itself. We did not regularly collect such soil or ground water samples within our production facilities for testing of contaminants in the past. However, as recommended by Atkins China, since September 2012, we have started to carry out routine monitoring and sample testing of the soil and ground water within our production facilities. Based on the monitoring report undertaken by the City Monitoring Station dated October 18, 2012, which have been reviewed by Atkins China, the contaminant within the soil and ground water sample collected within our production facilities did not exceed the limitation stipulated in the environmental quality standard for soils (GB15G18-1995) and the Quality Standard for ground water (GB/T 14848-9).

### **Environmental Incidents and Corrective Measures**

In February 2012, there were internet media articles alleging that we emitted hazardous gas and discharged wastewater into the En River, a drinking water protection area near our production facilities, causing lead-related pollution.

#### Wastewater Discharge Claim

In response to the wastewater discharge allegation, Atkins China has conducted site visits in August 2012 and viewed the above ground drainage points, and reviewed the information provided by our Group on the drainage system and interviewed our management. Based on their work, Atkins China identified that the design and layout of our drainage system shows that it directs the process wastewater into a detention pond located within our production facilities. The purpose of the detention pond is for the detention and sedimentation of industrial process wastewater for subsequent reuse in our production process. Our Directors confirm that the alleged wastewater discharge was untrue and unfounded.

There are a number of production plants near the drinking water protection area including a non-ferrous metal smelting company and a chemical company. According to the confirmation letter from the County EPB dated November 25, 2012, the County EPB has carried out sample testing of the water in the drinking water protection area since 2008 and the testing results have shown that

the quality of water in the drinking water protection area has met the applicable national and local standards.

Based on the confirmation letter from the County EPB dated December 7, 2012 regarding our drainage system, the County EPB has confirmed that up to the Latest Practicable Date (i) we constructed our drainage system in phases from 2008 to 2011 and have maintained it for normal and effective operations without any breakdown from the commencement of usage of such drainage system; (ii) there had not been any external discharge of industrial wastewater from our drainage system; (iii) we have not illegally discharged any wastewater from our production facilities; and (iv) our domestic wastewater discharge has met the applicable national standards for wastewater discharge. In addition, the County EPB confirmed in writing on September 20, 2012 that other than a complaint received in relation to the Grey or Black Smoke Incidents (as defined below), the County EPB has not received any complaints regarding the discharge of pollutants from our production sites. Furthermore, according to the confirmation letter from the County EPB dated December 7, 2012, the discharge and environmental management of wastewater from our production have complied with the applicable environmental protection requirements and standards under the PRC laws and regulations since our incorporation. Our Directors also confirm that insofar as our Directors are aware, as of the Latest Practicable Date we have not had any pending, potential or foreseeable third party claim, litigation, arbitration, administrative penalty or other judicial or administrative proceeding or investigation in relation to our wastewater discharge.

#### Pollutant Discharge Permit For Wastewater Discharge Not Required

Pursuant to the Law of PRC on Prevention and Control of Water Pollution, any entities that directly or indirectly discharge industrial wastewater or other wastewater into a water body shall obtain the Pollutant Discharge Permit as required by laws and regulations. The water body herein includes a river, lake, canal, channel, reservoir and other surface water and the underground water. The applicable PRC environmental laws and regulations have not clearly provided whether an entity which discharged wastewater in a pond within production facilities need to obtain the Pollutant Discharge Permit.

Since (i) we have obtained the notice issued by the Provincial EPD approving the design and construction of our drainage system based on the environmental impact assessment report; (ii) we have passed the environmental protection inspection and acceptance in respect of construction of our production plant; (iii) the County EPB has issued the confirmation letter dated December 7, 2012 to confirm that we have complied with the applicable environmental protection requirements and standards under the PRC laws and regulations since our incorporation, our PRC legal advisors, Jingtian & Gongcheng, are of the opinion that we do not need to obtain the additional Pollutant Discharge Permit for the wastewater discharged into the detention pond within our production facilities.

#### Grey or Black Smoke Incidents

In relation to the hazardous gas emission allegation, there were incidents in July and August 2011 where grey or black smoke was discharged from our chimneys (the "Grey or Black Smoke Incidents"), which were due to the malfunction of the relevant air emission equipment. The Grey or Black Smoke Incidents were caused by breakdown of bag filters which were used to filter dust from exhaust emission. We were aware of the Grey or Black Smoke Incidents before the posting of the internet media articles. As soon as we found out the release of grey or black smoke through the detectors installed on our chimneys and through visual observation by our production staff, we immediately connected exhaust pipes to one of the two standby chambers with new bag filters,

while the damaged bag filter was replaced. Immediately after the incidents occurred in July and August 2011, we rectified the problems by repairing and replacing the relevant equipment. In addition, we have implemented the following measures to discover in advance any potential problem of bag filter breakdown and prevent reoccurrence of such problem: (i) each production unit has a designated person during each production shift to check the conditions of bag filters and inspect environmental protection facilities every two hours and take immediate action upon occurrence of any issue or problem; (ii) bag filters, which generally can be used for at least one year, are replaced every six months regardless of their conditions; (iii) we constructed two additional standby chambers with new bag filters in August to September 2011 to prevent any occurrence of discharge of grey or black smoke; and (iv) we have strengthened our internal management and implementing measures for environmental protection and enhanced each production director's responsibilities for any environmental incident. Each replacement of all bag filters costs approximately RMB400,000. All costs and expenses to rectify the problem are part of our cost of implementing environmental protection measures and compliance with applicable environmental laws and regulations as disclosed above. As part of our on-going measures for exhaust emission monitoring, we have continued to use online detectors, which were connected online with the government network at the request of local environmental protection authorities in the third quarter of 2011, to effectively monitor exhaust emission. Local environmental protection authorities have used the online defectors to monitor our exhaust emission into the environment on a real time basis in accordance with national and local environmental standards. The Grey or Black Smoke Incidents have not caused any problems to us, our employees or any external party.

Atkins China interviewed the County EPB and noted that it was aware of the Grey or Black Smoke Incidents and, through follow-up site visits to our production facilities, the County EPB found that the malfunctioned equipment had been repaired. In addition, the County EPB confirmed with Atkins China that we have installed monitoring equipment on two chimneys at our production site to monitor exhaust emissions on a real time basis in accordance with the County EPB's requirements. Atkins China identified the monitoring equipment during their on-site visit. Jingtian & Gongcheng, our PRC legal advisors, are of the view that the Grey or Black Smoke Incidents would not have a material adverse legal consequence and effect on us and would not affect the renewal of our current licenses or permits.

According to the confirmation letters issued by the County EPB on September 20, 2012, the Grey or Black Smoke Incidents have been corrected and no administrative penalty has been imposed on us; other than a complaint received in relation to the Grey or Black Smoke Incidents, they have not received any complaints regarding the discharge of pollutants from our production sites. Our PRC legal advisors, Jingtian & Gongcheng, advised us that, pursuant to the Law of the PRC on the Prevention and Control of Atmospheric Pollution, in the event that we failed to take any corrective measures, the maximum amount of administrative penalty which could be imposed on us due to the Grey or Black Smoke Incidents was a fine of up to RMB50,000.

Our Directors confirm the Grey or Black Smoke Incidents was rectified by repairing the malfunctioned equipments which was continuously monitored by online defectors installed on two chimneys at our production site. Our Directors further confirm that the Grey or Black Smoke Incidents do not have any impact on our business operations, and that other than the Grey or Black Smoke Incidents, there was no dispute or complaint regarding our wastewater discharge and gas emission during the Track Record Period. In addition, our Directors confirm that insofar as our Directors are aware, as of the Latest Practicable Date we had not had any pending, potential or foreseeable third party claim, litigation, arbitration, administrative penalty or other judicial or administrative proceeding or investigation in relation to the Grey or Black Smoke Incidents.

### No Impact on ISO Certification

We obtained the GB/T 24001-2004/ISO 14001:2004 certification on our environmental management system from Hebei Yingbo on March 19, 2012, after the occurrence of the Grey or Black Smoke Incidents. Before granting the certification to us, Hebei Yingbo discussed with our management and inspected our environmental system. The Grey or Black Smoke Incidents do not have any impact on the certification of our environmental management system. We voluntarily obtained the certification, which is effective until March 18, 2015, to ensure that our environment management system conforms to GB/T 24001-2004/ISO 14001:2004 standards. We are not required to obtain or renew the certification with respect to our environmental management. The absence or non-renewal of this certification does not have any impact on our business operations.

## **Environmental Compliance Confirmations**

We have received the confirmation letters from the County EPB dated December 7, 2012 confirming that up to the Latest Practicable Date Longtianyong Nonferrous Metals (i) has complied with relevant requirements and standards under the national and local environment protection laws and regulations; (ii) had not had any delay or default in payment, or non-payment of the environmental protection and pollutant discharge fees; (iii) conducted environmental impact assessment and passed environmental protection inspection and acceptance in respect of all constructions, renovations and extensions of production facilities; (iv) had obtained various environmental protection permits and approvals required for business operation; and (v) had not been subject to any administrative punishment by the relevant competent authorities as a result of any breach of any relevant PRC environmental laws and regulations since our establishment.

Based on the above confirmations, our Directors consider that, during the Track Record Period and up to the Latest Practicable Date, we had not been exposed to any potential losses and liabilities as a result of environmental non-compliance.

According to the confirmation letter from the Yongfeng County Public Security Bureau dated September 19, 2012, the bureau never received any reports, complaints or requests to dispatch the police regarding our environmental protection issues, and there is no record showing we had been involved in any environmental protection disputes. Further, according to the confirmation letter issued by People's Court of Yongfeng County dated September 19, 2012, the court never received any lawsuit or dispute concerning us claimed by any prosecution authorities, enterprises and individuals. The disputes or lawsuits referred to in the above confirmation letters include but are not limited to any third party claim in relation to our wastewater discharge or the Grey or Black Smoke Incidents. Our PRC legal advisors, Jingtian & Gongcheng, confirm that the Yongfeng County Public Security Bureau and People's Court of Yongfeng County are competent authorities to confirm this matter. Our Directors further confirm that insofar as our Directors are aware, as of the Latest Practicable Date we had not had any pending, potential or foreseeable third party claim, litigation, arbitration, administrative penalty or other judicial or administrative proceeding or investigation, including but not limited to those caused by our wastewater discharge or the Grey or Black Smoke Incidents.

Jingtian & Gongcheng, our PRC legal advisors, are of the view that (i) our current production plant has fully complied with the relevant PRC laws and regulations in respect of construction approval and environmental impact assessment; and (ii) we have obtained all the necessary approvals and confirmations of environmental protection in respect of operation of our

current production plant. Jingtian & Gongcheng also confirms that the County EPB is a competent authority to give the confirmations as disclosed above.

Save as disclosed above, our Directors confirm that (i) we were in compliance with all applicable environmental laws and regulations in China in all material respects, (ii) we had obtained all material licenses and permits, and (iii) we had not been subject to any penalty imposed on our Group for violation of the environmental laws in China during the Track Record Period and up to the Latest Practicable Date.

### WORK SAFETY

We are subject to PRC safety laws and regulations, which set out legal standards for health and safety measures with which our operations must comply. We are required to provide our employees with work safety education and training, as well as work safety equipment that meet national and local standards. We are required to educate and supervise our employees to strictly follow our work safety rules and procedures.

On July 31, 2012, in view of our expanded operation and to strengthen our management, we separated the research and quality control department into three departments: namely, the research and development, the quality control, and the environmental protection and work safety departments, to fully serve different functions. After the Function Delineation became effective on July 31, 2012, our environmental protection and work safety department is comprised of four full-time employees who are dedicated to work safety. See the paragraph headed "— Environmental Protection — Our Environmental Protection Measures — Our Environmental Protection and Work Safety Department" in this section for disclosure on the experiences of the department members.

Since the establishment of our Group, we have formulated and implemented a series of occupational health and production safety plans, guidelines and monitory measures for our business operations. We have also established an evaluation and management system in which we give employees at various levels incentives based on his performance. Each department has implemented a systematic and effective mechanism to oversee and assess standardization of production safety, and any production safety-related issue is raised immediately and resolved through coordination among departments. Our general manager, deputy general manager, chief engineer, heads of different departments, production units and operating teams at all levels, and production workers are assigned with appropriate responsibilities for their positions and are required to enter into responsibility pledges with their respective supervisory managers. The environmental protection and work safety personnel play a key role in coordinating among various departments. Once every quarter, our environmental protection and work safety department conducts production safety inspections, for example, inspecting equipment and machines that handle inflammable, explosive and highly toxic articles, and promptly resolve any issue discovered during inspection. At the end of each year, we also conduct overall assessment of our evaluation and management system and evaluate if each employee meets production safety responsibilities and standards for his position. During the Track Record Period and up to the Latest Practicable Date, no material issue had been found with respect to non-compliance with relevant work safety requirements and standards.

Employees responsible for production safety are required to be familiar with applicable PRC laws, regulations and standards, and have knowledge about production safety management and relevant production technologies and procedures. We organize induction trainings and provide regular trainings to employees at various levels. A new employee is not assigned to any position

until the designated and more skilled personnel have completed induction training with him and the new employee has demonstrated his knowledge about and ability in safety in operation. Each employee working in our production process is not allowed to operate independently until he passes relevant assessments. See also the paragraph headed "— Environmental Protection — Our Environmental Protection Measures — Our Environmental Protection and Work Safety Department" in this section for detailed discussion about the relevant trainings and briefing on environmental protection and work safety.

In accordance with work safety requirements and standards, we provide adequate protective equipment, uniform and accessories to our production workers including those handling lead, antimony, nitric acid or slag. Every production worker is provided two sets of protective uniforms in summer and another two sets in winter. They are required to wear protective uniforms, shoes and other requisite accessories before and during each production shift and return them for cleaning after their production shifts. We clean protective uniforms within our production site every two days. In addition, to protect production workers from dusts, we require them to wear specially designed masks in any dusty environment throughout our production process in accordance with our production safety measures. Furthermore, sulfur dioxide from our production has gone through desulfurization treatment and bag filtering in accordance with national and local environmental protection requirements and standards, and we also require production workers to wear specially designed masks when they monitor or replace bag filters as part of our routine maintenance. If any production workers are found not having worn masks in any environment where they are required to do so, we will impose penalty on them. Our employees are trained upon commencement of employment and on a regular basis how to use and when to replace their protective gear including mask in accordance with our production safety measures. Our employees can request to replace their masks when necessary. The purpose of the above measures is to protect our production workers from any toxic and hazardous chemical used in or generated from our production process. During the Track Record Period and up to the Latest Practicable Date, there had not been any breach or violation of our production safety measures and we had not imposed any penalty on production workers.

We also conduct health and medical examinations to our employees who are handling potentially harmful or toxic materials and products once every year during employment and gradually improve our work conditions to prevent occupational diseases. We plan to conduct health and medical examinations to such employees upon commencement or termination of their employment starting in 2013.

To prevent occurrence of any fire accidents, our environmental protection and work safety department regularly checks on a fixed schedule whether sufficient fire control equipment is provided and being properly used. We have also established an emergency plan pursuant to which upon detection of any fire accidents, our management and relevant staff will be notified immediately so that they can take prompt actions. Moreover, by strictly enforcing our production safety measures, we require production workers to wear protective uniforms and shoes and to slowly and gradually release molten alloy during production to prevent any high temperature liquid leakage.

Furthermore, to minimize any impact caused by production equipment failure on our operations, we have backup equipment ready and can easily replace existing equipment upon occurrence of any equipment failure.

Our PRC legal advisors, Jingtian & Gongcheng, have reviewed our internal measures in relation to the production safety in our operations and advised us that we have established the

safety management system according to the applicable PRC laws and regulations, and the aforesaid internal measures do not violate applicable PRC laws and regulations regarding production safety.

On July 16, 2012, Longtianyong Nonferrous Metals was certified as having met the requirements for Third Level Enterprise of Non-Ferrous Smelting in Work Safety Standardization ( $\overline{\varphi} \pm \underline{x} \equiv \overline{\psi} \pm \underline{x} \pm \underline{x} \pm \underline{x}$ ) by the Ji An Work Safety Supervision Bureau in accordance with the three-level work safety standardization certification system (with level three being the lowest level and level one being the highest level). On March 19, 2012, Longtianyong Nonferrous Metals was certified by Hebei Yingbo that its occupational health and safety management system conforms to GB/T28001-2001 standard with respect to its health and safety management activities in relation to the production of silver, lead and zinc oxide series products. The certification is effective through March 18, 2015. We are not required to obtain or renew the certification with respect to our occupational health and safety management. Although the standard is generally recognized in the industry, the absence or non-renewal of the relevant certification does not have any impact on our business operations.

As of the Latest Practicable Date, we had maintained a low employee turnover rate. When any workplace accident or injury, or occupational illness of employee occurs, the responsible production director reports immediately to Mr. Song Guosheng, the head of our general production. We take immediate actions to address and resolve any problem or issue. Mr. Song makes record of any material incident. Furthermore, we have established an emergency plan to address issues relating to work safety. During the Track Record Period and up to the Latest Practicable Date, we had not been involved in any accident causing death or major injury or harm at our workplace, nor had any of our employees suffered from occupational illness or poisoning.

We have created and fostered a safe work environment for our employees. Based on the aforementioned various measures that we have already taken to report and handle workplace safety issues, we will continue to further develop our system of reporting and handling any employee injuries that may arise.

### PROPERTIES

Our existing production facilities is located in Western Industrial Park, Yongfeng County, Jiangxi Province, occupying three parcels of adjacent land with a total gross site area of approximately 200,000 square meters, of which 133,333 square meters have been used for our existing production plant and facilities and the remaining 66,667 square meters are available for future development. We obtained the land use right for the land in three stages in 2006, 2009 and 2011, respectively. Our real properties comprise 18 industrial buildings, 10 storage rooms, three staff dormitories and other ancillary structures with a total gross floor area of approximately 53,539 square meters. Our existing production facilities have undergone two phases of construction, with Phases I and II completed in 2008 and 2010, respectively. The additional improvement was completed by March 2012. Phase I of the construction involved the construction of production of warehouses and one staff dormitory and continuing construction of our office building, and the additional improvement involved construction of one production unit and one staff dormitory.

We have obtained all the required land use rights and building ownership certificates for all of our land and completed buildings, including office buildings, staff dormitories, production units and warehouses. We do not lease any properties for our production as of the Latest Practicable

Date. We believe that our current properties will meet our future needs and that we have sufficient space in our current properties to host our production facilities required for our annual production capacity expansion to 650 tonnes of silver ingot. Please refer to the Property Valuation Report set forth in Appendix IV to this prospectus for further details.

#### **INSURANCE**

We currently have property insurance coverage for our buildings, production equipment and machinery, facilities, furniture, and office equipment and tools as well as automobile coverage for our motor vehicles. We do not maintain any insurance coverage for our inventory or business interruption insurance or transportation insurance for the goods that are in transit. Our sales contract for silver ingot generally provides that we are responsible for the delivery of the silver ingots to our customers and we bear the risk of loss during the transportation. We believe our insurance coverage is in line with the industry practice for non-ferrous metal smelting companies in China. Please see the section headed "Risk Factors — We do not have sufficient insurance coverage for certain risks associated with our business operations" in this prospectus.

#### **EMPLOYEES**

#### **Employees**

As at June 30, 2012, we had 677 full-time employees. A breakdown by function as at June 30, 2012 is as follows:

Functions	Number of employees
Production	539
Management	40
Sale, marketing promotion and delivery	6
Research & development, quality control, environmental protection and work safety	35
Administration and support	_57
Total:	677

We believe that our management policies, working environment, employee development opportunities and employee benefits have contributed to good employee relations and employee retention. We provide additional benefits to our employees, such as free accommodation and food. We have not experienced any labor strikes or major labor disputes since our inception. Furthermore, we provide training programs for our employees to equip them with the requisite skills and knowledge for their positions. See also the paragraphs headed "— Work Safety" and "— Environmental Protection — Our Environmental Protection Measures — Our Environmental Protection and Work Safety Department" in this section for detailed discussion about our training programs for our employees.

#### Social Welfare Schemes

In accordance with relevant PRC labor laws and regulations, we are required to contribute to a number of employee social welfare schemes for our employees. We have obtained a confirmation letter dated August 2, 2012 in respect of our full-time employees from the Human Resource, Labor and Social Security Bureau of Yongfeng County (永豐縣人事勞動和社會保障局) which states that (i) we had participated in the social welfare schemes operated by the relevant government authorities, (ii) since October 2007, we had made full contributions to employee social welfare schemes for pension insurance, medical insurance, unemployment insurance, maternity insurance

and job-related injury insurance for our employees (other than the employees during their probation period), (iii) we had not been subject to any administrative punishment as a result of any breach of the relevant PRC labor and social security laws and regulations, and (iv) we will not be subject to any administrative punishment due to any breach of the relevant PRC labor and social security laws and regulations.

In accordance with relevant PRC labor laws and regulations, we are required to contribute to the employee social welfare schemes for our employees in probation period. We do not make social welfare contributions for our employees during their employment probation period in line with the practice for other enterprises in Ji An City. As of June 30, 2012, the total outstanding amount payable by us in relation to our required contribution to the social insurance was approximately RMB1.6 million, of which approximately RMB1.1 million were provided for the delinquent payments of contributions to the social insurance for employees who were subject to probation during the Track Record Period. Such additional provision reflected the total of approximately RMB400,000, RMB200,000, RMB500,000 and nil we made for the year ended December 31, 2009, 2010 and 2011, and the six months ended June 30, 2012, respectively.

In connection with our obligation to make such contributions during the Track Record Period, we have obtained a confirmation letter dated August 14, 2012 from the Human Resource, Labor and Social Security Bureau of Yongfeng County, which states that (i) the bureau was aware of our non-contribution and will not require us to repay such contribution retroactively, and (ii) we will not be subject to any administrative punishment due to our past non-contribution. Jingtian & Gongcheng, our PRC legal advisors, are of the view that except for the above non-compliance, we have complied with the PRC laws and regulations relating to mandatory social security funds and applicable employment laws and regulations in China.

From the respective dates of the relevant confirmations as disclosed above and up to the Latest Practicable Date, we have contributed to employee social welfare schemes (which cover, among other things, employee medical insurance and workers' compensation insurance), and we believe our overall employee social welfare schemes are in line with industry practice and in accordance with all relevant PRC regulations and standards. We made contribution to the employee social welfare schemes in the amount of approximately RMB2.3 million, RMB3.1 million, RMB5.0 million and RMB2.6 million for the year ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Since July 1, 2012 up to the Latest Practicable Date, we contributed approximately RMB1.4 million to the social welfare schemes for our employees. Please see the section headed "Risk Factors — Non-compliance with PRC employee social welfare contribution regulations could lead to the imposition of fines or penalties" in this prospectus for further information on our outstanding contribution amount under the social welfare schemes.

As provided under these social welfare schemes, any insurance or job-related insurance payouts for our employees will be covered by the social welfare funds. If any compensation is to be paid out to employees, the precise amount will be determined by the degree of injury and the corresponding compensation standards provided by PRC laws and regulations. Furthermore, the insurance payouts to employees would come from the social insurance funds rather than us, as according to the relevant PRC laws and regulations on social insurance. The social insurance premiums paid by a company are deposited into a financial account specially designated for the social insurance funds opened by the financial department of local government at a state-owned commercial bank, which is jointly designated by the financial department and the social security department of local government. Such social insurance funds are used to pay the expenses related to social insurance benefits required by laws and regulations.

# Housing Funds

We are generally required under the PRC laws and regulations to make full contributions to the social welfare schemes operated by the relevant government authorities covering housing funds for our employees and provide them with housing benefits in China. We did not participate in, and we did not make full contribution to the housing funds for our employees during the Track Record Period because the local system for participation and contribution of housing funds were not fully established at that time.

The outstanding amount payable by us in relation to our required contribution to the housing fund was approximately RMB374,000, RMB877,000, RMB1,682,000 and RMB2,103,000 for the year ended December 31, 2009, 2010 and 2011, and the six months ended June 30, 2012, respectively.

Based on the confirmation letter issued by the Yongfeng Municipality Housing Fund Administration dated August 10, 2012, it is confirmed that (i) consistent with the local practice in Yongfeng County, Jiangxi Province, we were not required to make housing fund contributions, (ii) we had not been subject to any punishment due to the failure to make contributions to the housing fund or, nor had we been required to pay retroactively for the unpaid contributions, and (iii) in the event that registration and contribution of housing funds become compulsory in Yongfeng County, Jiangxi Province, we would not likely be required to pay retroactively for any unpaid contributions to the housing funds since the establishments of Longtianyong Nonferrous Metals and Longtianyong Recycling for our employees.

As advised by our PRC legal advisors, Jingtian & Gongcheng, we are not likely to be subject to any administratively penalty by the competent governmental authority or be required to make retroactive contribution due to our failure to register with housing fund scheme or our failure to make housing fund contributions.

### Share Option Scheme

Our Directors (including independent non-executive Directors) and employees are entitled to participate in the Share Option Scheme. The principal terms of the Share Option Scheme are summarized in "Appendix VI — Share Option Scheme".

### LEGAL PROCEEDINGS

During the Track Record Period and up to the Latest Practicable Date, members of our Group were not engaged in any litigation, arbitration or claim of material importance against third parties, nor were we aware of any litigation, arbitration or claim which was pending or threatened by third parties against our Group that would have a material adverse effect on our results of operations or financial condition.