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This announcement is not for distribution, directly or indirectly, in or into the United States.



(Incorporated under the laws of the Cayman Islands with limited liability) (Stock Code: 01378)

### **PROPOSED ISSUANCE OF SENIOR NOTES**

We propose to conduct an international offering of senior notes denominated and settled in US dollars. In connection with the Proposed Notes Issue, we will provide certain institutional investors with recent corporate and financial information regarding our Group, including updated risk factors, industry overview, a description of our business and strategies, management's discussion and analysis of financial condition and results of operations. An extract of such information is attached to this announcement and will also be available at our Company's website at <u>www.hongqiaochina.com</u> at approximately the same time that such information is released to the institutional investors. Some of this information has not previously been made public.

The completion of the Proposed Notes Issue is subject to market conditions and investor interest. The pricing of the Notes, including the aggregate principal amount, the Offer Price and interest rate, will be determined through a book building exercise conducted by Barclays Bank PLC, J.P. Morgan Securities and Credit Suisse as the joint bookrunners and joint lead managers.

Upon finalization of the terms of the Notes, Barclays Bank PLC, J.P. Morgan Securities, Credit Suisse and our Company, among others, will enter into a Purchase Agreement and other ancillary documents in respect of the Notes, as applicable. We intend to apply the net proceeds from this offering for the construction of our power plants, expansion of our production capabilities including establishment of potential overseas production facilities, working capital and repayment of our short-term indebtedness.

Approval in principle has been received from the SGX-ST for the listing and quotation of the Notes on the Official List of the SGX-ST. Admission of the Notes to the SGX-ST is not to be taken as an indication of the merits of our Company, subsidiaries or the Notes. No listing of the Notes has been sought in Hong Kong.

As no binding agreement in relation to the Proposed Notes Issue has been entered into as at the date of this announcement, the Proposed Notes Issue may or may not be completed. Investors and shareholders of our Company are urged to exercise caution when dealing in the securities of our Company.

Further announcement in respect of the Proposed Notes Issue will be made by our Company should a Purchase Agreement be signed.

### THE PROPOSED NOTES ISSUE

### Introduction

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The Proposed Notes Issue will only be offered outside the United States, in compliance with Regulation S under the Securities Act. None of the Notes will be offered to the public in Hong Kong and none of the Notes will be placed to any connected persons of the Company.

### **Reasons for the Proposed Notes Issue**

We are the fourth-largest aluminum product manufacturer in China. We have vertically integrated operations that cover the entire aluminum industry value chain consisting of production facilities for alumina, molten aluminum alloy and aluminum alloy ingot, aluminum fabrication production facilities as well as power generation facilities.

We intend to apply the net proceeds from this offering for the construction of our power plants, expansion of our production capabilities including establishment of potential overseas production facilities, working capital and repayment of our short-term indebtedness.

### Listing

Approval in principle has been received from the SGX-ST for the listing and quotation of the Notes on the Official List of the SGX-ST. Admission of the Notes to the SGX-ST is not to be taken as an indication of the merits of our Company, subsidiaries or the Notes. No listing of the Notes has been sought in Hong Kong.

### GENERAL

As no binding agreement in relation to the Proposed Notes Issue has been entered into as at the date of this announcement, the Proposed Notes Issue may or may not be completed. Investors and shareholders of our Company are urged to exercise caution when dealing in the securities of our Company.

A further announcement in respect of the Proposed Notes Issue will be made by the Company should a Purchase Agreement be signed.

### **UPDATED INFORMATION OF THE GROUP**

### Overview

We are the fourth-largest aluminum product manufacturer in China. We have vertically integrated operations that cover the entire aluminum industry value chain consisting of production facilities for alumina, molten aluminum alloy and aluminum alloy ingot, aluminum fabrication production facilities as well as power generation facilities.

We believe that we enjoy sustainable profitability because of our vertically integrated business model, our cost advantages and high operational efficiency and through centralized procurement of raw materials and electricity locally. We are strategically headquartered in Zouping County, Shandong Province, within an end-to-end industrial aluminum production cluster that includes Gaoxin, our primary raw material supplier, and local down-stream users, which we believe provides us with substantial cost and operational advantages and results in other synergies. All of our manufacturing bases and our main electricity and alumina supplier, Gaoxin, are in close geographic proximity to each other (within 80 km of each other) and are connected by our in-house power supply grid. We are connected to other major production bases of downstream aluminum fabrication products, such as Henan Province, Liaoning Province and Jiangsu Province, and major alumina production bases and coal resources in Shandong Province, Shanxi Province and Henan Province, through developed transportation networks.

We currently have four manufacturing bases, one located in Zouping, one in Weiqiao, one in Binzhou and one in Huimin. Our production capacity of aluminum products on a weighted average basis was approximately 738,973 tons, 970,496 tons, 1,507,916 tons and 836,792 tons for the three years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, with utilization rates of approximately 98.3%, 110.9%, 105.7% and 107.3%, respectively, during the respective periods. As of June 30, 2012, we had an annual designed capacity of 1,776,000 tons. We expect our designed production capacity of aluminum products to reach 2 million tons per year by the end of 2012.

Our aluminum products consist of molten aluminum alloy, aluminum alloy ingots, aluminum alloy casting-rolling products and aluminum busbars. We began manufacturing aluminum products in 2006 by using self-manufactured primary aluminum. Our aluminum products are made from alumina and carbon anodes through a smelting process by means of electrolytic reduction.

We have achieved significant growth in our sales volume of aluminum products since our inception. We sold approximately 731,043 tons, 1,064,775 tons, 1,585,810 tons and 895,565 tons of aluminum products for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, and generated revenue of approximately RMB8,668.4 million, RMB14,453.9 million, RMB22,928.4 million and RMB12,251.1 million (US\$1,928.4 million) for these periods from sales of aluminum products. During the same periods, we achieved net profit of approximately RMB567.6 million, RMB4,220.2 million, RMB5,875.4 million and RMB2,840.4 million (US\$447.1 million), respectively.

The following table sets forth the sales volume, revenue, average selling price of, and percentage of our revenue derived from, each type of our products for the periods indicated:

		20	009			2011						
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue
Aluminum products												
Molten aluminum alloy	445,614	5,334.5	11,971	61.5%	903,099	12,204.1	13,514	80.7%	1,173,652	16,972.4	14,461	71.8%
Aluminum alloy ingot	278,270	3,243.7	11,657	37.5%	157,240	2,183.0	13,883	14.4%	405,347	5,845.6	14,421	24.7%
Aluminum busbar	7,159	90.2	12,609	1.0%	4,436	66.8	15,059	0.4%	6,348	103.0	16,225	0.4%
Aluminum alloy												
casting-rolling products	-	-	-	-	-	-	-	-	463	7.4	15,983	0.1%
Subtotal	731,043	8,668.4	11,858	100.0%	1,064,775	14,453.9	13,575	95.5%	1,585,810	22,928.4	14,458	97.0%
Steam	_	_	_	_	5,105,024	677.7	133	4.5%	5,255,568	697.6	133	3.0%
Steam					5,105,024		155		5,255,500		155	
Total		8,668.4		100.0%		15,131.6		100.0%		23,626.0		100.0%
10(a)		0,000.4		100.0%		15,151.0		100.0%		25,020.0		100.0%

		Six months ended June 30,										
		20	)11			20	12					
	Volume	Revenue (RMB in	Average selling price	Percentage of revenue	Volume	Revenue (RMB in	Average selling price	Percentage of revenue				
	(tons)	millions)	(RMB/ton)		(tons)	millions)	(RMB/ton)					
Aluminum products Molten aluminum alloy Aluminum alloy ingot Aluminum busbar Aluminum alloy casting-rolling products Subtotal	585,170 175,471 2,077  762,718	8,448.0 2,506.3 32.8  10,987.1	14,437 14,283 15,792  14,405	74.5% 22.1% 0.3%  96.9%	596,269 285,887 7,097 <u>6,312</u> 895,565	8,047.5 4,004.1 107.1 92.4 12,251.1	13,496 14,006 15,091 <u>14,635</u> 13,680	63.9% 31.8% 0.9% 0.7% 97.3%				
Steam	2,623,080	348.2	133	3.1%	2,601,466	345.3	133	2.7%				
Total		11,335.3		100.0%		12,596.4		100.0%				

Molten aluminum alloy is our major product, the sales of which accounted for approximately 61.5%, 84.4%, 74.0% and 65.7% of our revenue derived from aluminum products for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Compared with the production of aluminum alloy ingots, the production of molten aluminum alloy allows us to avoid incurring molding and other relevant costs. By purchasing molten aluminum alloy, our customers minimize transportation costs and save the cost of smelting or reheating aluminum alloy ingots for further processing, including the related equipment, labor and storage costs. We are able to provide our customers with molten aluminum alloy due to our close proximity to them, which, we believe, provides us with significant cost and operational advantages and results in other synergies.

We benefit from arrangements in relation to the key inputs into our aluminum products. Primarily, these include (i) cost advantages from the production of a significant amount of the electricity that we use for the production of our aluminum products at our thermal power stations, (ii) our in-house power grid connecting our four manufacturing bases, (iii) cost advantages from purchasing off-grid electricity from Gaoxin, (iv) pricing discounts resulting from our bulk purchases of alumina from our principal supplier of alumina, Gaoxin, and (v) cost advantages from the production of a portion of the alumina we use in our manufacturing in-house. In 2010, 2011 and for the six months ended June 30, 2012, we produced 55.1%, 44.0% and 55.1%, respectively, of the electricity we used in our production of aluminum products at our thermal power stations. We produced this electricity at a cost below the purchase price of electricity that we purchase externally. The remainder of our electricity requirements were purchased from Gaoxin pursuant to a direct power supply agreement and delivered via our in-house power grid. Our purchases of electricity from Gaoxin accounted for approximately 66.5%, 88.8% and 89.2% of its total electricity output for 2010 and 2011 and the six months ended June 30, 2012, respectively. Due to our off-grid structure and bulk purchases, we have been able to purchase our electricity from Gaoxin at a price below average on-grid electricity prices. Moreover, we purchased approximately 47.8%, 58.8% and 50.9% of the total volume of alumina sold by Gaoxin for 2010 and 2011 and the six months ended June 30, 2012, respectively. Due to the significant volume of alumina that we purchase from Gaoxin and Gaoxin's close proximity to our operations, we believe that we have been able to negotiate price discounts with respect to such alumina purchases. Gaoxin is an independent third party, in which the Labor Union Committee of Shandong Zouping Economic Development Zone holds substantially all of the beneficial interest. It had an aggregated designed annual production capacity of 4.0 million tons of alumina as of June 30, 2012. In 2012, we constructed facility to produce alumina inhouse. Alumina thus produced accounted for approximately 26.3% of the total alumina supply for our manufacturing during the six months ended June 30, 2012 and is expected to satisfy at least 45% of our total alumina needs for the six months ending December 31, 2012. We believe that producing our alumina in-house enables us to enjoy additional cost savings and reduce our supplier dependency.

We sell all of our aluminum products to domestic customers, who are located mainly in Shandong Province as well as in other regions of China, such as in Northeastern, Southern, Eastern and Northern China. Our customers include downstream aluminum fabrication product manufacturers, who process our aluminum alloy products into aluminum fabrication products, and traders, who in turn resell our aluminum products to downstream aluminum fabrication product manufacturers or other traders. For the six months ended June 30, 2012, all of our molten aluminum alloy customers were located within 30 kilometers from us. Approximately 63.9% of our revenue for the six months ended June 30, 2012 was derived from the sales of molten aluminum alloy.

### **Recent Developments**

We are constructing new thermal power station units to expand our electricity production capacity, which we expect to increase to approximately 2,730 MW by the end of 2012. Since 2011, we have added 990 MW of electricity production capacity. As of June 30, 2012, our electricity production capacity was 2,070 MW.

We are developing advanced aluminum fabrication products production capacity at our Binzhou and Zouping manufacturing bases. In 2011, we completed a production line at our Binzhou manufacturing base for aluminum alloy casting-rolling and foil products with an aggregate designed annual production capacity of approximately 30,000 tons. For the six months ended June 30, 2012, we had produced a total of 13,793 tons of aluminum alloy casting-rolling products. In 2011, we also started to build an aluminum product production line at our Zouping manufacturing base with a designed annual production capacity of approximately 760,000 tons. We intend to use this line for the production of high precision aluminum plate and stripe products and other aluminum products. We believe these products to be different from the products of our local downstream customers and therefore do not expect to compete with our existing customers. We expect to begin operating this production line in 2014.

For the period from January 1, 2010 to March 31, 2011, Gaoxin was our sole supplier of alumina. In 2011, we entered into an alumina purchase agreement with an independent alumina supplier based in Qingdao, pursuant to which it agreed to provide us with a total volume of 250,000 tons of alumina from April 2011 to December 2012. For the six months ended June 30, 2012, approximately 74,056 tons of alumina had been delivered under that agreement, accounting for approximately 4.4% of our total alumina consumption for the same period. During the six months ended June 30, 2012, we constructed facilities to make use of coal fly ash, including an in-house alumina production facility with an aggregate annual production capacity of up to 2,000,000 tons of alumina. Alumina thus produced accounted for approximately 26.3% of the total alumina supply for our manufacturing during that period and is expected to satisfy at least 45% of our total alumina needs for the six months ending December 31, 2012. Our purchase of alumina from Gaoxin accounted for only approximately 69.3% of the total alumina we used to produce products in the six months ended June 30, 2012.

We are currently exploring overseas joint venture opportunities to develop bauxite and alumina production capabilities to supplement our domestic raw material supplies, which opportunities may or may not materialize in the near future.

On April 10, 2012, we issued US\$150,000,000 aggregate principal amount of 6.5% convertible bonds due 2017. See "Description of Other Material Indebtedness – Offshore Financing – The Convertible Bonds" below. On September 17, 2012, we paid off the Previous J.P. Morgan Facility. We entered into the new J.P. Morgan Facility on September 7, 2012 and we expect to draw down US\$460 million and HK\$320 million on or about September 25, 2012 from the J.P. Morgan Facility. See "Description of Other Material Indebtedness – Offshore Financing – The J.P. Morgan Facility" below.

In 2011, we submitted to PRC regulators an application for approval to issue corporate bonds in the principal amount of approximately RMB2.6 billion through Shandong Hongqiao. As of the date of this announcement, we have not yet obtained approval for this proposed issuance. In addition, we are in the process of applying with relevant PRC authorities for approval to issue medium term notes in the principal amount of approximately RMB3.0 billion.

### Six months ended June 30, 2012 compared to six months ended June 30, 2011

### Revenue

Our revenue increased by approximately 11.1% to approximately RMB12,596.4 million (US\$1,982.7 million) for the six months ended June 30, 2012 from approximately RMB11,335.3 million for the six months ended June 30, 2011, primarily due to an increase in the sales volume of our aluminum products partially offset by a decrease in the average selling price of our aluminum products. Our sales volume of aluminum products increased by approximately 17.4% to approximately 895,565 tons for the six months ended June 30, 2011, which was in line with the steady increase of our customer demand and our increased production capacity and output. The average selling price of our aluminum products decreased by approximately 5.0% to approximately RMB13,680 (US\$2,153.3) (excluding value added tax) per ton for the first half of 2012 from approximately RMB14,405 (excluding value added tax) per ton for the first half of 2011.

### Cost of sales

Our cost of sales increased by approximately 17.0% to approximately RMB8,521.6 million (US\$1,341.4 million) for the six months ended June 30, 2012 from approximately RMB7,286.2 million for the six months ended June 30, 2011, primarily due to an increase in the sales volume of our aluminum products.

### Gross profit and gross profit margin

As a result of the foregoing, our gross profit increased by approximately 0.6% to approximately RMB4,074.8 million (US\$641.4 million) for the six months ended June 30, 2012 from approximately RMB4,049.1 million for the six months ended June 30, 2011. Our overall gross profit margin decreased by 3.4 basis point to approximately 32.3% for the six months ended June 30, 2012 from 35.7% for the six months ended June 30, 2011, primarily due to a decrease in the unit sales price of aluminum products in the first half of 2012 as compared to that of the corresponding period of the previous year while the unit production cost of aluminum products remained stable.

### Other income and gain and loss

Our other income and gain and loss increased by approximately 34.0% to approximately RMB186.3 million (US\$29.3 million) for the six months ended June 30, 2012 from approximately RMB139.0 million for the six months ended June 30, 2011, primarily due to (i) an increase in revenue from sales of slag of carbon anode blocks due to an increase in the amount of slag of carbon anode blocks that we generated as a result of our increased production of aluminum products, and (ii) foreign exchange loss reduction.

### Distribution and selling expenses

Our distribution and selling expenses increased by approximately 80.5% to approximately RMB28.9 million (US\$4.5 million) for the six months ended June 30, 2012 from approximately RMB16.0 million for the six months ended June 30, 2011. The increase in our distribution expenses was mainly attributable to an increase in our transportation cost to approximately RMB21.8 million (US\$3.4 million) for the first half of 2012 from approximately RMB15.7 million for the first half of 2011 as a result of an increase in the sales volume of our aluminum products, an increase in transportation unit cost, and a larger proportion of aluminum alloy ingots that we sold as compared to molten aluminum alloy which had a shorter delivery distance and hence the transportation cost of which was lower.

### Administrative expenses

Our administrative expenses increased by approximately 58.3% to approximately RMB131.3 million (US\$20.7 million) for the six months ended June 30, 2012 as compared to approximately RMB82.9 million for the corresponding period of the previous year, mainly due to the increase in administrative staff headcount and their remuneration as a result of our production capacity expansion and the increase in local tax payables and amortization of prepaid lease payments arising from our purchase of land for the construction of new plants for the expansion of our production capacity.

### Finance costs

Our financial costs increased by approximately 94.7% to approximately RMB259.7 million (US\$40.9 million) for the six months ended June 30, 2012 as compared to approximately RMB133.4 million for the corresponding period of the previous year, primarily due to increased interest expenses because of our increased total bank borrowings in the first half of 2012 as compared to the corresponding period of the previous year.

### Other expenses

Our other expenses were approximately RMB11.2 million (US\$1.8 million) for the six months ended June 30, 2012 mainly for payment of fees for external professional service. Our other expenses were approximately RMB15.8 million for the six months ended June 30, 2011, mainly for expenses related to our IPO.

### Income tax expense

Our income tax for the first half of 2012 amounted to approximately RMB1,019.4 million (US\$160.5 million), representing a decrease of approximately 1.4% as compared to approximately RMB1,033.9 million for the corresponding period of the previous year, which was mainly attributable to the decrease of our profit before taxation for the first half of 2012.

### Profit and total comprehensive income for the period

As a result of the foregoing, our profit and total comprehensive income for the period decreased by approximately 2.3% to approximately RMB2,840.4 million (US\$447.1 million) for the six months ended June 30, 2012 from approximately RMB2,906.1 million for the six months ended June 30, 2011.

### **Description of other material indebtedness**

To fund our existing business operations and to finance our working capital requirements, we have borrowed money or incurred indebtedness from various banks. As of June 30, 2012, our total borrowings amounted to approximately RMB10,301.2 million (US\$1,621.5 million), of which approximately RMB1,127.3 million (US\$177.4 million) were secured borrowings.

### **Offshore Financing**

### The Convertible Bonds

On April 10, 2012, we issued US\$150,000,000 aggregate principal amount of 6.5% convertible bonds ("**Convertible Bonds**"), convertible into fully-paid ordinary shares with a par value of US\$0.01 each of the Company ("**Shares**"). The Convertible Bonds were listed on SGX-ST on April 11, 2012. The Convertible Bonds will mature on April 10, 2017 ("**Maturity Date**"). The Convertible Bonds bear interest from (and including) April 10, 2012 at the rate of 6.5% per annum calculated by reference to the principal amount thereof and payable in US dollars semi-annually in arrears in equal installments in April and October in each year, commencing on October 10, 2012. The Convertible Bonds constitute direct, unsubordinated, unconditional and (subject to the terms and conditions of the Convertible Bonds) unsecured obligations of the Company and shall at all times rank *pari passu* and without any preference or priority among themselves. The payment obligations of the Company under the Convertible Bonds shall, save for such exceptions as may be provided by mandatory provisions of applicable law and subject to the terms and conditions of the Convertible Bonds shall, save for such exceptions of the Convertible Bonds, at all times rank at least equally with all of its other present and future senior, unsecured and unsubordinated obligations.

The Convertible Bonds may be converted into Shares at any time on or after May 21, 2012 up to the close of business on the tenth day prior to the Maturity Date, or if such Convertible Bond has been called for redemption before the Maturity Date, then up to the close of business on a date no later than ten days prior to the date fixed for redemption, or if notice requiring redemption has been given by the holder of such Convertible Bond, then up to the close of business on the day prior the giving of such notice. Unless previously redeemed, converted, purchased and cancelled, the Company will redeem each Convertible Bond on the Maturity Date at 100% of its principal amount together with accrued and unpaid interest. The initial conversion price ("Conversion Price") was HK\$7.27. The Conversion Price will be subject to adjustment for, among other things, consolidation, subdivision or reclassification of Shares, capitalization of profits or reserves, capital distributions, rights issues of shares or options over shares, rights issues of other securities, other dilutive events and change of control of the Company. The Conversion Price was adjusted from HK\$7.27 per Share to HK\$6.81 per Share, effective May 24, 2012, after the Company declared a final dividend of HK\$32.0 cents per Share for the year ended December 31, 2011 to the shareholders of the Company.

The Convertible Bonds also contain customary redemption provisions and events of default.

The Convertible Bonds are unsecured as of the date of this announcement. However, the Convertible Bonds contain a customary negative pledge, pursuant to which holders of the Convertible Bonds will be entitled to have the benefit of any collateral that holders of indebtedness similar to the type contemplated to be incurred under the Notes (if any) have. As a result, the trustee for the Convertible Bonds will become a party to the Intercreditor Agreement. See "Intercreditor Agreement" below.

### The J.P. Morgan Facility

Shandong Hongqiao entered into a facility agreement with, among others, JPMorgan Chase Bank, N.A., Hong Kong Branch as facility agent ("**J.P. Morgan**") on September 7, 2012, pursuant to which a syndicate of lenders agreed to advance to Shandong Hongqiao term loans of up to US\$460 million and HK\$320 million.

All of the term loans will mature on August 15, 2015, with the principal amount payable in installments every month, starting from December 15, 2012. The interest rate for all the term loans denominated in US dollars are LIBOR plus 3.30% per annum. The interest rate for all the term loans denominated in HK dollars are HIBOR plus 3.30% annum.

Shandong Hongqiao may, if it gives J.P. Morgan not less than five business days prior notice in writing, prepay the whole or any part of any loan on the last day of any interest period relating to such loan.

The J.P. Morgan Facility is secured by (i) an assignment by Shandong Hongqiao of an offtake agreement between Shandong Hongqiao and J.P. Morgan China Commodities Corporation ("JPMCNCC"), (ii) a pledge over all of Shandong Hongqiao's presently owned and future acquired account receivables under the off-take agreement described in (i) above and (iii) subject to pari passu sharing under the Intercreditor Agreement, the common collateral under the Intercreditor Agreement which currently consists of the share charges over the shares of Hongqiao Investment, Hongqiao Hong Kong and Hongqiao Trading. Shandong Hongqiao entered into an offtake agreement with JPMCNCC under which Shandong Hongqiao agreed to sell to JPMCNCC certain aluminum ingots. All sale proceeds under this agreement are required to be deposited into certain onshore bank accounts with J.P. Morgan China that are subject to escrow arrangements. If an event of default under the J.P. Morgan Facility agreement occurs, J.P. Morgan as facility agent will be entitled to instruct the escrow bank to transfer all proceeds in these onshore bank accounts to offshore accounts, as directed by J.P. Morgan (subject to necessary SAFE approval) and J.P. Morgan may enforce against the collateral securing the term loans other than the common collateral, without consulting with the trustee for the Notes (if any) or any representative of any permitted pari passu secured indebtedness.

We are subject to certain financial covenants under the J.P. Morgan Facility agreement. In addition, we have further agreed, among other things, that no member of the Group will:

- create or permit to subsist any security over any of its assets, except for any permitted security under the J.P. Morgan Facility;
- enter into a single transaction or a series of transactions to sell, lease, transfer or otherwise dispose of any asset, except for any permitted disposal under the J.P. Morgan Facility;
- enter into any amalgamation, demerger, merger or corporate reconstruction;
- make any restricted payment except for a permitted restricted payment under the J.P. Morgan Facility; and
- incur or allow to remain outstanding any financial indebtedness other than any permitted financial indebtedness under the J.P. Morgan Facility.

The J.P. Morgan Facility agreement contains certain customary events of default, including for nonpayment of amounts under the facility, breaches of the terms of the credit agreement, insolvency and non-payment of financial indebtedness of any member of the Group.

As of the date of this announcement, we have not yet borrowed from the J.P. Morgan Facility agreement.

### Previous J.P. Morgan Facility

We paid off all outstanding amounts under the Previous J.P. Morgan Facility on September 17, 2012.

### **Intercreditor Agreement**

On September 18, 2012, the Company, certain of our subsidiaries, The Bank of New York Mellon acting through its Hong Kong Branch as common security agent (the "**Common Security Agent**") and others entered into an intercreditor agreement (the "**Intercreditor Agreement**"), to which the trustee for the Convertible Bonds and the trustee for the Notes (if any) will accede on the date of the issuance of the Notes. Pursuant to the Intercreditor Agreement, each secured party thereunder agrees that the security interest over the common collateral will be shared equally and ratably among the secured parties and the obligations owing to such secured parties shall rank *pari passu* with each other. J.P. Morgan as security agent under the J.P. Morgan Facility are, and the trustee for the Convertible Bonds and the trustee of the Notes (if any) will be secured parties under the Intercreditor Agreement. Future creditors of permitted pari passu secured indebtedness may accede to the Intercreditor Agreement as secured parties.

If an event of default under the debt documents that are subject to the Intercreditor Agreement has occurred, the applicable secured party may instruct the Common Security Agent to enforce the common collateral. Such instructions may be overruled by a conflicting instruction from another secured party or parties unless consented to by secured parties representing more than 50% of the principal amount of the debt obligations subject to the Intercreditor Agreement.

### **Onshore Loans**

Our PRC subsidiaries have entered into bilateral loan agreements with a number of PRC banks, namely Agricultural Bank of China, Bank of Beijing, Bank of Communications, Bank of China, China Construction Bank, China CITIC Bank, China Everbright Bank, Evergrowing Bank, Industrial and Commercial Bank of China and Deutsche Bank (China) Co., Ltd. We have six loans which are construction loans for our production facilities, the rest of the onshore loans are working capital loans. The maturity of our loans ranges from less than one year to five years. Our bilateral loan agreements contain customary covenants and events of default. Some of the bilateral loan agreements between Industrial and Commercial Bank of China and our subsidiaries, Aluminum & Power and Shandong Hongqiao, prohibit the repayment of loans to their shareholders prior to the repayment of a sparent from Aluminum & Power or Shandong Hongqiao in the form of a repayment of a shareholder loan (in order to enable us to meet our obligations under the Notes (if any) or otherwise), we may be required to prepay the relevant loans should we fail to obtain consents or waivers from Industrial and Commercial Bank of China at such time.

We have both fixed rate and floating rate borrowings. Fixed rate borrowings are charged at the prevailing market rates ranging from 5.14% to 8.53% per annum as of June 30, 2012. Interest on our borrowings at floating rates are calculated based on the borrowing rates announced by the People's Bank of China.

### DEFINITIONS

In this announcement, the following expressions have the meanings set out below unless the context requires otherwise:

"Aluminum & Power"	山東魏橋鋁電有限公司 (Shandong Weiqiao Aluminum and Power Co., Ltd.), a limited liability company incorporated under the laws of the PRC on December 25, 2002 and an indirect wholly-owned subsidiary of the Company
"Antaike"	北京安泰科信息有限公司 (Beijing Antaike Information Development Co., Ltd.), an independent specialist market research company engaged by the Company
"Barclays"	Barclays Bank PLC, one of the joint bookrunners and joint lead managers in respect of the Proposed Notes Issue
"Board"	the board of directors of the Company
"China" or "PRC"	the People's Republic of China excluding except where the context otherwise requires, for the purpose of this announcement, Hong Kong, Macau Special Administrative Region of China and Taiwan
"Company"	China Hongqiao Group Limited (中國宏橋集團有限公司), a company incorporated in the Cayman Islands with limited liability the shares of which are listed on the Main Board of the Stock Exchange
"connected person"	has the meaning ascribed to it under the Listing Rules
"Credit Suisse"	Credit Suisse Securities (Europe) Limited, one of the joint bookrunners and joint lead managers in respect of the Proposed Notes Issue
"Gaoxin"	濱州高新鋁電有限公司(Binzhou Gaoxin Aluminum & Power Joint Stock Co., Ltd.), formerly known as 鄒平高新熱電有限 公司(Zouping Gaoxin Power Co., Ltd.), a joint stock company incorporated under the laws of the PRC on January 24, 2007, which is 98.0% owned by Shandong Zouping Yunda Investment Management Company Limited and 2.0% owned by Shandong Zouping Kaida Real Estate Company Limited
"Group"	the Company and its subsidiaries

"Hongqiao Hong Kong"	Hongqiao Investment (Hong Kong) Limited (宏橋投資(香港) 有限公司), a company incorporated in Hong Kong with limited liability on February 18, 2010 and an indirect wholly-owned subsidiary of our Company
"Hongqiao Investment"	China Hongqiao Investment Limited (中國宏橋投資有限公司), a company incorporated in the BVI with limited liability on February 5, 2010 and a direct wholly-owned subsidiary of our Company
"Hongqiao Trading"	Hongqiao International Trading Limited (宏橋國際貿易有限公司), a company incorporated in Hong Kong with limited liability on April 11, 2012 and an indirect wholly-owned subsidiary of our Company
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"J.P. Morgan Facility"	the term loan facility under the facility agreement dated September 7, 2012 entered into by, among others, JPMorgan Chase Bank, N.A., acting through its Hong Kong Branch as facility agent and security agent, certain lenders, and Shandong Hongqiao, as borrower
"J.P. Morgan Securities"	J.P. Morgan Securities plc, one of the joint bookrunners and joint lead managers in respect of the Proposed Notes Issue
"Listing Rules"	the Rules Governing the Listing of Securities on the Stock Exchange
"Notes"	the senior notes denominated and settled in US dollars to be issued by the Company
"Offer Price"	the final price at which the Notes will be sold
"Previous J.P. Morgan Facility"	the term loan facility under the facility agreement dated November 28, 2011 (as amended on February 22, 2012) entered into by, among others, JPMorgan Chase Bank, N.A., acting through its Hong Kong Branch as facility agent and security agent, certain lenders and the Company, as borrower, which was repaid and terminated on September 17, 2012
"Proposed Notes Issue"	an international offering of the Notes by the Company
"Purchase Agreement(s)"	an agreement proposed to be entered into between, among others, the Company, Barclays Bank PLC, J.P. Morgan Securities and Credit Suisse in relation to the Notes
"Securities Act"	the United States Securities Act of 1933, as amended

"Shandong Hongqiao"	山東宏橋新型材料有限公司 (Shandong Hongqiao New Material Co., Ltd., previously known as Shandong Weiqiao Dyeing Company Limited (山東位橋染織有限公司)), a limited liability company established in the PRC on July 27, 1994 and an indirect wholly-owned subsidiary of our Company
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"SGX-ST"	Singapore Exchange Securities Trading Limited
	By order of the Board China Honggiao Group Limited

China Hongqiao Group Limited Zhang Shiping

Chairman

Hong Kong, September 21, 2012

As at the date of this announcement, the Board comprises nine Directors, namely Mr. Zhang Shiping, Ms. Zheng Shuliang, Mr. Zhang Bo, Mr. Qi Xingli as executive Directors, Mr. Yang Congsen, Mr. Zhang Jinglei as non-executive Directors, and Mr. Chen Yinghai, Mr. Xing Jian and Mr. Han Benwen as independent non-executive Directors.

### CHINA HONGQIAO GROUP LIMITED 中國宏橋集團有限公司

Operating and Financial Data September 21, 2012

#### **RISK FACTORS**

You should carefully consider the risks described below and all other information contained in this document circular before making an investment decision. You should pay particular attention to the fact that we are incorporated in the Cayman Islands and that almost all of our operations are conducted in China and are governed by a legal and regulatory environment that differs from those that prevail in other countries. If any of the following risks actually occur, our business, financial condition and results of operations could be materially and adversely affected.

We believe that there are certain risks and uncertainties involved in our operations, some of which are beyond our control. We have categorized these risks and uncertainties into: (i) risks relating to our business; (ii) risks relating to our industry; and (iii) risks relating to doing business in the PRC.

#### **Risks Relating to Our Business**

### Our business and results of operations are dependent on the market price of aluminum products, which is driven by factors beyond our control.

Our business is sensitive to fluctuations in the prices of aluminum products. Like most aluminum producers in China, we price our aluminum products primarily by reference to spot market prices. The average prices (not including taxes) of aluminum ingots labelled as A00 released by Yangtze River Non-ferrous Metals Spot Market were approximately RMB11,941 per ton, RMB13,497 per ton, RMB14,387 per ton and RMB13,635 (US\$2,146.2) per ton for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, according to Antaike. Fluctuations in the market prices of aluminum products may affect our results of operations. Details of historical price movements of aluminum products are set out in the section headed "Industry Overview" in this document.

The prices of aluminum products have historically fluctuated in response to market forces, such as global mine production, roasting and smelting production, global and PRC economic conditions and industrial demand. In recent years, there have been significant fluctuations in the prices of aluminum products. These fluctuations have been driven by changes in the end-use of aluminum products, as a result of fluctuations in investment in the construction, electrical, transport and consumer durables sectors. For example, for 2009, 2010 and 2011 and the six months ended June 30, 2012, the average selling price of our aluminum products per ton was approximately RMB11,858, RMB13,575, RMB14,458 and RMB13,680 (US\$2,153.3), respectively. The average selling price of our aluminum products rebounded in 2010 and 2011 from a lower level in 2009 primarily due to the recovery of the PRC economy from the global financial crisis that started in the second half of 2008. After the aluminum price rallied in early 2011, the price has decreased since August 2011 due to the recent economic crisis in Europe and its negative impacts on PRC economy. Any sustained decline in the prices of aluminum products in the future is expected to have a negative impact on our financial condition and results of operations.

In addition, the prices of our raw materials fluctuate from time to time. Even if there is an increase in the market price of our products, it may not be enough to compensate for an increase in the prices of raw materials, and as a result, our business, financial condition, results of operations and prospects may be materially and adversely affected. Furthermore, if prices of our raw materials increase while the market prices of our products decrease or do not increase correspondingly for any reason, our business, financial condition, results of operations and prospects will be materially and adversely affected.

### We will continue to rely on procurement of alumina and electricity from Gaoxin. If Gaoxin is unable or unwilling to supply alumina or electricity to us at commercially acceptable terms, or at all, our operations would be disrupted, and our business, financial condition and results of operations would be materially and adversely affected.

Alumina is the principal raw material for the production of our aluminum products. Purchase of alumina accounted for approximately 30.7%, 36.4%, 36.8% and 35.7% of our total cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Until December 31, 2009, we purchased all of our alumina from Chuangye Group, which, as of June 30, 2012, was 33.72% owned by Mr. Zhang, our Controlling Shareholder. In December 2009, Chuangye Group sold its alumina assets to Gaoxin, in which the Labor Union Committee of Shandong Zouping Economic Development Zone held substantially all of the beneficial interest as of the date of this document. We entered into an alumina supply agreement with Gaoxin in December 2009, which was subsequently supplemented on December 27, 2009, January 6, 2010 and October 20, 2011 which extended the term of the agreement to December 31, 2015. Gaoxin was our sole alumina supplier from January 2010 to March 2011. In 2011 and for the six months ended June 30, 2012, we purchased 2,935,567 tons and 1,181,320 tons, respectively, of alumina from Gaoxin. In 2011, we entered into a supply contract with an independent alumina supplier based in Qingdao, pursuant to which we agreed to purchase 250,000 tons of alumina from April 2011 to December 2012. For the six months ended June 30, 2012, approximately 74,056 tons of alumina was delivered under that agreement, accounting for approximately 4.4% of our total alumina consumption for the same period. Purchases from the supplier in Qingdao constituted approximately 4.4% of our total alumina purchase for the first six months of 2012. During the first six months of 2012, we constructed facilities to make use of coal fly ash, including an in-house alumina production facility with an aggregate annual production capacity of up to 2,000,000 tons of alumina. The alumina we produced at our in-house production facility accounted for approximately 26.3% of the total alumina supply for our manufacturing during the six months ended June 30, 2012 and is expected to satisfy at least 45% of our total alumina needs for the six months ending December 31, 2012. Nonetheless, we expect to continue to rely on continued procurement of alumina from Gaoxin for the foreseeable future.

We entered into an electricity supply agreement with Gaoxin in June 2008, as amended on November 2, 2011, which does not have a definite term and can be terminated by a 90-day prior written notice provided by any party. See "Business – Electricity Supply." Gaoxin started to supply electricity to us in July 2008 and has been our sole external electricity supplier since January 2010. Gaoxin was our largest supplier during 2010 and 2011 and the six months ended June 30, 2012, accounting for approximately 58.4%, 61.6% and 51.5%, respectively, of our total procurement (including both alumina and electricity) during such periods.

In June 2010, we entered into a memorandum of understanding with Thermal Power Station of Zouping County Electricity Co., Ltd., or Zouping Electricity, a state-owned power grid, to further secure our electricity supply, but the memorandum of understanding is not legally binding and we cannot assure you that Zouping Electricity will fully fulfill its commitments under this memorandum of understanding. In addition, the price of electricity supplied by Zouping Electricity will be based on the then on-the-grid price as stipulated by the PRC government, which is likely to be materially higher than the price of the electricity supplied to us by Gaoxin. See "Business – Electricity Supply – Electricity suppliers."

The future relationship between our Group and Gaoxin and the willingness and capability of Gaoxin to supply alumina and electricity to us will be critical to our business and operations. If Gaoxin is unwilling or unable to provide us with high-quality alumina and electricity in required quantities and at commercially acceptable prices, or if Gaoxin is required by relevant PRC regulatory authorities to comply with more stringent procedures and requirements than those currently in place, or if the relevant PRC regulatory authorities are of the view that the approval, construction, environmental or safety compliance of the production of alumina of Gaoxin does not fully comply with relevant PRC laws, rules or regulations, or if Gaoxin is ordered by relevant PRC regulatory authorities to change, suspend construction or production or close relevant production facilities as a result of any past, or future illegal operation, or any past or future non-compliance with relevant PRC laws, rules or regulations, resulting in inadequate or delayed supply of

alumina or electricity to us, we may be unable to find alternative sources at the same price level offered by Gaoxin or at otherwise commercially acceptable prices or terms in a timely manner, or at all, which would disrupt our operations and have a material adverse effect on our business, financial condition, results of operations and prospects.

## If there is any material adverse change in Gaoxin's business, financial condition and results of operations, our business, financial condition and results of operations could be materially and adversely affected.

Alumina and electricity are two principal cost components of our cost of sales, accounting for approximately 35.7% and 36.4%, respectively, of our total procurement for the first six months of 2012. From 2010 through March 2011, Gaoxin was our sole supplier of alumina. Gaoxin is also our sole external supplier of electricity. In addition, pursuant to the alumina supply agreement between Gaoxin and us, Gaoxin agreed to provide us with price discounts with reference to the sales price of alumina supplied by Gaoxin to other independent third parties in early January of the relevant year, which will be determined through negotiation. Our average alumina purchase price was RMB1,621 per ton for 2010, RMB1,874 per ton for 2011 and RMB1,788 (US\$281.4) per ton for the six months ended June 30, 2012, which was lower than the average spot market price of alumina (not including taxes) of RMB2,350 per ton, RMB2,308 per ton and RMB2,252 (US\$354.5) per ton in China for the same periods according to Antaike. This is also an important factor that contributed to the significant increase in our net profit for 2010 and 2011.

Our future relationship with Gaoxin and the willingness and capability of Gaoxin to supply alumina and electricity to us are critical to our business and operations. If there is any material adverse change in Gaoxin's business, financial condition or results of operations, or if it is unwilling or unable to provide us with high-quality alumina and electricity in required quantities and at commercially acceptable prices, or at all, or if it enters into bankruptcy proceedings, our business, financial condition and results of operations would be materially adversely affected.

In addition, in accordance with the alumina supply agreement, we have maintained a deposit of RMB400.0 million with Gaoxin for its alumina supply to us. Moreover, we usually make full payment before we receive alumina and electricity from Gaoxin. We make prepayments in several instalments to Gaoxin every month and Gaoxin settles the purchase payment of electricity and alumina with us by issuing invoices to us at the end of every month based on our actual purchased amount. If there is any material adverse change in Gaoxin's business, financial condition or results of operations, or if it enters into bankruptcy proceedings, we may not be able to recover such deposit or prepayments, and our business, financial condition and results of operations could be materially and adversely affected.

### It may be difficult for investors to evaluate our business and prospects due to our limited operating history and changes in our cost structure.

We started to produce aluminum products in September 2006. We have experienced rapid growth in our aluminum manufacturing business since then. Due to our limited operating history, there may not be an adequate basis for investors to evaluate our future results of operations and prospects. Moreover, our future business growth may not continue at the same rate as what we have experienced in the past. In addition, we had certain operations before 2010 that have been discontinued. See "Business – Discontinued Operations." Profit from our discontinued operations was approximately RMB31.5 million, nil and nil for 2010 and 2011 and the six months ended June 30, 2012, respectively, while loss from our discontinued operations was RMB9.4 million for 2009.

Furthermore, Chuangye Group was our sole alumina supplier for 2009. In May 2006, one of our subsidiaries, Aluminum & Power, entered into the Agency Agreement with Chuangye Group, pursuant to which we procured alumina from Chuangye Group at its production cost. In December 2009, Chuangye Group sold its alumina production facilities to Gaoxin. We entered into an alumina supply agreement with Gaoxin in December 2009, pursuant to which the parties agreed to determine the base price of alumina supplied to our Group with reference to the sales price of alumina offered by Gaoxin to other independent third parties in early January of the relevant year. In addition, provided that (i) we pick up the alumina in

bulk by ourselves, (ii) our purchase volume is more than one million tons each year and (iii) we maintain a deposit of RMB400 million, Gaoxin agreed to provide us with price discounts, to be determined through negotiation. Gaoxin was our sole alumina supplier from January 2010 to March 2011 and we will continue to rely primarily on Gaoxin for the supply of alumina to us in the future. As the pricing mechanisms of alumina provided by Chuangye Group and Gaoxin are different, our historical raw materials cost and product cost structure may not be indicative of our raw materials cost and product cost structure in the future.

As a result, investors may have difficulties in evaluating our business and prospects because our historical performance may not be indicative of our business, financial condition and results of operations in the future.

## Any disruption in our aluminum product manufacturing facilities or our thermal power stations or our alumina production facility could materially and adversely affect our business, financial condition and results of operations.

Our existing aluminum manufacturing facilities, including those under construction and our thermal power stations or our alumina production facility are located within or in close proximity to Zouping County or Binzhou Economic Development Zone, in China's Shandong Province. Any disruption or significant damage to our aluminum product manufacturing facilities or our thermal power stations or our alumina production facility from natural or other causes, such as flood, fire and earthquake, could be costly and time-consuming to repair and could disrupt our operations. In such an event, we would be forced to seek alternative manufacturing sites, alumina supply and facilities or electricity supplies, which we believe would be extremely difficult to locate and secure given the highly specialized and large-scale nature of our aluminum product manufacturing business and our significant requirements for alumina and electricity. Even if we are able to identify an alternative manufacturing site, alumina supply or electricity suppliers following the occurrence of such an event, we would likely incur significant additional costs and experience disruptions in the production of our products.

Our operations may be disrupted for other reasons as well. For example, if we fail to procure adequate raw materials or electricity for our production activities or at all, our operations will be disrupted.

In addition, our smelting pots contain molten electrolytic aluminum. Should our production facilities suspend operations for any reason, such molten electrolytic aluminum would be solidified by the low temperature, and as a result, it would take a significant time and extra electricity to recommence operations. Any disruption in our operations could have a material adverse impact on our ability to produce sufficient quantities of products or may require us to incur significant expenses in order to produce sufficient quantities to meet our contractual obligations, and could impair our ability to meet the demand of customers and result in customers cancelling their purchase orders, any of which could materially and adversely affect our business, financial condition and results of operations.

### If the end-user markets of aluminum products contract or do not grow at the pace we expect, our business, financial condition and results of operations may be materially and adversely affected.

Our business development has depended, and will continue to depend, substantially on the growth of end-user markets for aluminum products. We experienced significant growth in the sales volume of our aluminum products during the three years ended December 31, 2011 and the six months ended June 30, 2012. Growth in sales of our aluminum products has been primarily driven by growth in the end-user markets in which our aluminum products are used, particularly in the construction, electrical, transport and consumer durables sectors in the PRC. Any decline in the demand for our aluminum products from end-users could have a material adverse effect on our business, financial condition and results of operations.

## If we fail to obtain sufficient amounts of raw materials that meet our quality standards and at commercially acceptable prices, our business, financial condition and results of operations will be materially and adversely affected.

Our business requires certain key raw materials, such as alumina, carbon anodes and fluorides. We cannot assure you that we will not experience any shortage in their supply in the future. If any shortage occurs,

it could materially and adversely affect our production, business and results of operations. If any of our existing suppliers is unwilling or unable to provide us with high-quality raw materials in required quantities and at commercially acceptable prices, we may be unable to find alternative sources at commercially acceptable prices, on satisfactory terms in a timely manner, or at all, which would have a material adverse effect on our business, financial condition and results of operations.

In particular, because alumina is one of the principal components of our cost of goods sold, accounting for approximately 73.4%, 64.7%, 66.6% and 71.0% of our total purchase cost of raw materials for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, the price of alumina has a significant impact on our profitability. According to Antaike, the average price of alumina (not including taxes) in China was approximately RMB2,000 per ton, RMB2,350 per ton, RMB2,308 per ton and RMB2,252 (US\$354.5) per ton for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Although we have begun self-production of alumina, we expect to continue to rely on external supply of alumina in the future. We cannot assure you that there will not be any sudden shortages in our supply of alumina, or any fluctuations in its price due to changes in market conditions. In the event that the cost of alumina or any other raw materials that we use in the future increase significantly and we are not able to pass on the additional cost to our customers, our profit margin may be reduced.

### If the bauxite supply to our major alumina supplier, Gaoxin, or us is disrupted, our business, financial condition and results of operations will be materially and adversely affected.

Our major alumina supplier, Gaoxin, and we use bauxite as a raw material for alumina production. We source a significant portion of bauxite from Indonesia. According to Gaoxin, it currently has several bauxite suppliers which are located in Indonesia and India.

There is uncertainty regarding the impact of a new regulation in Indonesia in relation to the export of bauxite from Indonesia. On February 6, 2012, the Indonesian Minister of Energy and Mineral Resources ("MEMR") enacted Regulation No. 7 of 2012 ("Regulation 7") which sets forth certain processing and refining requirements for mining companies with respect to certain specified metals and non-metallic minerals and bans the export of certain unprocessed metals and non-metallic minerals, including bauxite. In May 2012, the Indonesian government announced it would impose a 20% tariff on bauxite and certain other metal ores, and then ban the export of such ores in 2014.

The above and other factors will affect the ability of our suppliers or of Gaoxin's suppliers to export bauxite. Any disruption to the bauxite supply to Gaoxin or us due to regulatory changes in Indonesia or other places where Gaoxin's or our bauxite suppliers are located, or due to other factors, could have a material adverse impact on our business, financial condition and results of operations.

### We face risks from our compliance, and Gaoxin's compliance, with environmental protection and workplace safety laws and regulations and safety risks from our operations and Gaoxin's operations.

We and our principal alumina supplier, Gaoxin, are required to comply with all relevant national and local environmental and occupational safety laws and regulations in the PRC. Our and Gaoxin's production processes necessarily involve producing pollutants. For example, the production process of alumina creates solid waste called "red mud," which, if not stored and processed properly, is harmful to human health and pollutes soil and water. There are numerous laws and regulations governing environmental protection and occupational safety. Moreover, we expect to be subject to additional requirements in the future, as the PRC government continues to pass laws aimed at strengthening environmental protection and occupational safety measures and adopts more stringent environmental and occupational safety standards. In addition, we expect that this trend will continue and that compliance will require additional capital expenditures and results of operating costs, which may materially and adversely affect our business, financial condition and results of operations. Any failure by us to control the use of, or to adequately restrict the discharge of, hazardous substances or maintain workplace safety could subject us to potential significant monetary damages, fines or administrative, civil or criminal sanctions, which could disrupt, limit or even result in the suspension of our operations.

Any failure by Gaoxin, our principal alumina supplier, or us to control the use of, or to adequately restrict the discharge of, hazardous substances (for example, with respect to the storage and discharge of red mud and similar waste generated in the production process) could subject Gaoxin or us to potential significant monetary damages, cleanup and storage costs fines or administrative, civil or criminal sanctions or

liabilities, which could disrupt, limit or even result in the suspension of Gaoxin's or our production activities. Gaoxin's being subject to any such fines, costs, damages or sanctions could cause inadequate or delayed supply of alumina and electricity (as Gaoxin also supplies a significant amount of our electricity) which could materially and adversely affect our business, financial condition and results of operations. Our being subject to any such fines, costs, damages or sanctions could materially and adversely affect our business, financial condition, results of operations and prospects.

Additionally, we and Gaoxin engage in operations which involve certain safety risks, including the production of aluminum products, power generation and alumina production. For example, an explosion occurred in an aluminum molding and casting factory that was owned by a wholly-owned subsidiary of Chuangye Group, which resulted in 20 fatalities and 55 injuries and the destruction of the relevant aluminum production facilities. Although we were not involved in the aforesaid accident, and we have devoted a substantial amount of resources to work safety and accident prevention, there can be no assurance that we or Gaoxin will not experience accidents or other workplace safety problems in the future. Any failure by us to ensure workplace safety could result in our being subject to significant monetary damages, loss of our production or power generation facilities, cleanup costs, fines or administrative, civil or criminal sanctions or liabilities, which could in turn affect our business, financial condition, results of operations and prospects. Additionally, any failure by Gaoxin to ensure workplace safety could result in it being subject to significant monetary damages, loss of production or power generation facilities, which could affect its business and operations and prospects. Additionally, any failure by Gaoxin to ensure workplace safety could result in it being subject to significant monetary damages, loss of production or power generation facilities, cleanup costs, fines or administrative, civil or criminal sanctions or liabilities, which could affect its business and operations and its ability to continue to supply alumina and electricity to us, which could have a materially adverse effect on business, financial condition, results of operations and prospects.

## Current environmental liabilities as well as the cost of compliance with, and liabilities under, health and safety laws could increase our operating costs and negatively affect our financial condition and results of operations.

Our operations are subject to environmental laws and regulations, which govern, among other things, air emissions, wastewater discharges, the handling, storage and disposal of hazardous substances and wastes, the remediation of contaminated sites and employee health and safety. Future environmental regulations could impose stricter compliance requirements on the industries in which we operate. Additional pollution control equipment, process changes, or other environmental control measures may be needed at some of our facilities to meet future requirements.

Financial responsibility for contaminated property may be imposed on us where our operations have had an environmental impact. Such liability may include the cost of investigating and remediating contaminated soil or ground water, fines and penalties sought by environmental authorities, and damages arising out of personal injury, contaminated property and toxic tort claims. These costs of all such matters have not been material to net income (loss) in the past. However, future remedial requirements at currently owned or operated properties or adjacent areas could result in significant liabilities.

### We may not be able to expand successfully.

Our growth prospects and future profitability depend on, among other matters, our ability to successfully increase our production capability and capacity, either generally or with respect to demand from customers. As such, we have expanded and intend to continue to expand our operations, including to other geographical locations outside of the PRC, and such expansion has placed, and will continue to place, substantial demands on our managerial, operational, financial, technological and other resources. For example, from January 1, 2009 through June 30, 2012, our annual designed aluminum production capacity increased from 687,891 tons to 1,776,000 tons. We are also developing our production capacity for advanced aluminum fabrication products such as aluminum foil, aluminum alloy casting-rolling products and high precision aluminum plate and stripe products. We have been constructing new thermal power station units to expand our electricity production capacity, which we expect to increase to approximately 2,730 MW by the end of 2012. We have also begun producing alumina in our in-house facility. In addition, we may invest or acquire other downstream or upstream businesses in the PRC or overseas. We are currently exploring overseas joint venture opportunities to develop bauxite and alumina production capabilities to supplement our domestic raw material supplies, which opportunities may or may not materialize in the near future.

However, we may not be able to sell our products (including our advanced aluminum fabrication products) at the prices that we expect, or at all, and we may not be able to manufacture these products successfully. We may not be able to fully utilize the additional electricity we plan to generate or produce alumina up to the required standard, or at all. Furthermore, we may not be able to identify appropriate investment or acquisition targets and we may fail to obtain the necessary approvals, permits or filings or develop our projects in a timely fashion or at all. In any of these events, our business, financial condition and results of operations could be materially and adversely affected as a result.

In particular, the PRC government has recently enacted prohibitions on the expansion of electrolytic aluminum manufacturing facilities and the construction of new electrolytic aluminum manufacturing facilities. See "Industry Overview – Competition Landscape" and "Regulation Overview." Although we believe that these will not restrict our current expansion plans, we cannot assure you that we will not be prevented from expanding our aluminum products manufacturing facilities or constructing additional such facilities in the future by similar regulations.

Furthermore, we have limited experience and expertise in the aluminum products manufacturing business, related upstream business and developing, manufacturing or marketing aluminum products and other new products in the downstream chain of the aluminum industry in the PRC, and we do not have any experience and expertise in managing aluminum products manufacturing business or related upstream or downstream businesses outside of PRC. We may not be able to achieve the vertical integration that we are targeting. Any future expansion, in relation to our existing production line or new products, will also place significant demand on us to maintain the quality of our products. To accommodate our growth, we will need to implement a variety of new and upgraded operational and financial systems, procedures and controls, including improvements to our internal management systems. We will also need to implement effective training programs to ensure consistently high-quality performance by our employees. All of these measures will require substantial management efforts. If we are unable to effectively manage our growth, our business, financial condition and results of operations may be materially and adversely affected.

### If any of our large customers reduces its purchases of, or fails to pay for, our products, our business, financial condition and results of operations will be materially and adversely affected.

Our five largest customers accounted for approximately 58.0%, 73.7%, 65.1% and 57.1% of our revenue of continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Our largest customer accounted for approximately 20.0%, 40.8%, 33.5% and 30.0% of our revenue of continuing operations for the same periods. However, we have relatively short relationship histories with our top customers, ranging from one to six years, due to our short operating history.

Our business, financial condition and results of operations will continue to depend on: (i) our ability to continue to obtain purchase orders from our customers; (ii) the financial condition and commercial success of our customers; and (iii) factors that affect the development of the aluminum production industry. We cannot assure you that we will be able to retain any of our large customers or any other key customers. Any material delay or reduction in, or cancellation of, purchase orders from our key customers could cause our sales to decline significantly, and in any such event, our results of operations may be materially and adversely affected. We cannot assure you that these customers will place orders with us in the future at the same levels as in prior periods, or that any of these or future customers will not terminate their purchase agreements with us or significantly change, reduce, delay or cancel their purchase orders. If any of the foregoing events occurs, especially with respect to our large customers, there would be a material adverse effect on our business, financial condition and results of operations.

Our business, financial condition and results of operations also depend on the financial condition and commercial success of these customers. Although we have not experienced any material default or delay in payments by our customers, we cannot assure you that it will not occur in the future. If one or more of our large customers were to become insolvent or otherwise unable to pay for the products supplied by us, our business, financial condition, results of operations and business prospects would be materially and adversely affected.

In addition, one or more of our key customers may reorganize by means of a corporate spin-off, merger or otherwise. Any such reorganization could disrupt, slow down or otherwise materially affect their business and operations and, therefore, our revenue. Moreover, the entities resulting from such reorganization may change suppliers or sourcing policies. If any of our key customers decides to significantly change its procurement methods, or otherwise reduces or eliminates the purchase of our aluminum products, our revenue would decline significantly.

### We derive a significant portion of our revenue of aluminum products from Zouping County, Shandong Province through the sales of molten aluminum alloy.

We are headquartered in Zouping County, Shandong Province, which is one of the major aluminum product manufacturing bases in China. There are a number of downstream aluminum product manufacturers based in Zouping County. In particular, all of our molten aluminum alloy customers are based in Zouping County and in close proximity to our relevant manufacturing bases. Our revenue generated from sales of molten aluminum alloy accounted for approximately 61.5%, 84.4%, 74.0% and 65.7% of our total revenue of aluminum products for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. If demand for our molten aluminum alloy in Zouping County does not increase in line with our business expansion or if such demand decreases, we will have to look for alternative customers for our other aluminum products outside Zouping County. However, we may be unable to find alternative customers for our other aluminum products or at commercially acceptable prices on satisfactory terms in a timely manner, or at all, which would have a material adverse effect on our business, financial condition and results of operations.

### If disruptions in our transportation network occur or our transportation costs substantially increase, we may be unable to deliver our products in a timely manner and our operating expenses could increase.

We are highly dependent upon third party logistics service providers to deliver our products to our customers. As we seek to closely match our inventory levels to our product demand, it is critical that our transportation systems function effectively and without delay. The transportation network is subject to disruption from a variety of causes, including operational inefficiencies, labor disputes or port strikes, acts of war or terrorism and natural disasters. In particular, as a hazardous good for transportation, the transport of our molten aluminum alloy may be delayed due to bad weather conditions, such as heavy snow. If our delivery time increases unexpectedly for these or any other reasons, our ability to deliver our aluminum products on time would be materially and adversely affected and result in delayed or loss of revenue. In addition, if fuel prices were to increase, our transportation costs would likely further increase. A prolonged transportation disruption or a significant increase in the cost of transportation could materially and adversely affect our business, financial condition and results of operations.

### We rely on one single transport company to deliver our molten aluminum alloy products to our customers and it may be difficult to find alternative carriers.

Molten aluminum alloy has to be transported in specially designed containers to keep its temperature at 750°C to 900°C during delivery. Molten aluminum alloy is considered a hazardous good for transportation and special licenses and equipment are required for its transport. Binzhou Yinhe was our sole service provider for the delivery of our molten aluminum alloy products during the three years ended December 31, 2011 and the six months ended June 30, 2012, and we expect to rely on Binzhou Yinhe exclusively for delivery of molten aluminum alloy products in the near future. As confirmed by Binzhou Yinhe, we were among its five largest customers for 2009, 2010 and 2011 and the six months ended June 30, 2012. If Binzhou Yinhe is unwilling or unable to continue to deliver molten aluminum alloy for us, it may be difficult to find alternative carriers due to the special requirements for molten aluminum alloy transport. If we are unable to find alternative carriers on satisfactory terms in a timely manner, or at all, our business, financial condition and results of operations would be materially and adversely affected.

### If our electricity costs increase significantly or if we are unable to obtain sufficient electricity supply, our business, financial condition and results of operations will be materially and adversely affected.

Aluminum production requires a stable supply of electricity in large quantities. Our electricity cost was approximately RMB3,870.9 million, RMB3,483.0 million, RMB5,674.5 million and RMB3,102.4 million (US\$488.3 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. We have

been able to meet our electricity needs by purchasing from Gaoxin and by generating electricity using our own thermal power stations. However, we may experience increased electricity costs, electricity shortages or disruptions in electricity supply in the future. For example, coal is an important material used to generate electricity. We purchase coal from a number of coal suppliers and have entered into long-term coal supply agreements with certain of such suppliers. The purchase cost of coal accounted for approximately 11.2%, 20.7%, 16.0% and 18.2% of our total cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. As a result, any increase in the price of coal could increase the cost of electricity generated by our thermal power stations. We also cannot assure you that our suppliers will not terminate or fail to perform under these long-term coal supply agreements. Additionally, we started to sell steam produced by our thermal power stations to Gaoxin in January 2010. Our revenue from the sale of steam was approximately RMB677.7 million, RMB697.6 million and RMB345.3 million (US\$54.3 million) for 2010 and 2011 and the six months ended June 30, 2012, or 4.5%, 3.0% and 2.7%, respectively, of our total revenue. We cannot assure you that Gaoxin will not decrease the amount of steam it purchases from us in the future or that we will continue to have sufficient supply to sell to Gaoxin. If any such decrease or shortage occurs, our revenue from steam will decline. These could materially and adversely affect our results of operations and business. Gaoxin's cost of generating electricity may increase, which in turn may result in an increase in the price of the electricity supplied to us by Gaoxin.

In addition, the price of electricity we purchase from Gaoxin is subject to adjustment through negotiation if the price fluctuation of coal with a heat value of 5,000 kilocalories per kilogram exceeds 20%. As a result, any increase in the base price of coal exceeding 20% could increase the price of electricity we purchase from Gaoxin. The electricity supply agreement between Gaoxin and us also does not have a definite term and can be terminated by a 90-day prior written notice provided by any party. If Gaoxin chooses to terminate this electricity supply agreement, we cannot guarantee you that we may be able to find alternative sources at the same price level offered by Gaoxin or at otherwise commercially acceptable prices or terms in a timely manner. If there is a significant increase in our electricity costs as a result of an increase in coal cost or other reasons, an insufficient electricity supply to satisfy our production needs or any disruption in electricity supply, our business, financial condition and results of operations would be materially and adversely affected.

### We may require additional capital in the future, which may not be available to us on commercially acceptable terms in time, or at all.

Our aluminum production facilities and thermal power stations are highly capital-intensive to construct and maintain. Our capital expenditures amounted to approximately RMB1,089.1 million, RMB2,949.5 million, RMB9,153.5 million and RMB5,577.5 million (US\$877.9 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, which were primarily used to increase our production capacity. We are in the process of expanding the production capacity of our aluminum products and thermal power stations. Our future capital requirements may be substantial as we continue to seek to grow our business. We may need to raise additional funds to meet these requirements. From time to time, our plans may change due to changing circumstances, the development of our business, unforeseen contingencies or new opportunities and we may not be able to implement our plan within our budget. If our plans do change, we may need to obtain additional external financing to meet our capital expenditure plans, which may include commercial bank borrowings or the issuance of equity or debt securities. If we decide to raise additional funds through the incurrence of debt, our interest and debt repayment obligations will increase, and we may be subject to additional covenants, which could limit our ability to access cash flows from operations. We cannot assure you that we will be able to raise adequate financing to fund our future capital requirements on commercially acceptable terms in time, or at all.

### The global financial crisis which commenced in 2008 and the recent economic crisis in Europe have had a negative impact on the global economy, including the aluminum industry. If the economic downturn continues, it may materially and adversely affect our business, liquidity, financial condition, results of operations and prospects.

The global financial crisis which commenced in the second half of 2008 and the recent economic crisis in Europe caused substantial volatility in the capital markets and a downturn in the global and PRC aluminum industry. As a result, China's growth rates of aluminum consumption slowed down, and the prices of

aluminum products experienced dramatic fluctuations in 2009, 2010 and 2011 and the six months ended June 30, 2012. The average selling price of our aluminum products was approximately RMB11,858 per ton for 2009, RMB13,575 per ton for 2010, RMB14,458 per ton for 2011 and RMB13,680 (US\$2,153.3) per ton for the six months ended June 30, 2012. Our gross profit margin of continuing operations was approximately 10.4% for 2009, 37.9% for 2010, 34.6% for 2011 and 32.3% for the six months ended June 30, 2012.

Furthermore, banks' lending policies and the availability of credit to non-state-owned entities, such as ourselves, are significantly influenced by global financial conditions and levels of investor confidence in credit markets, which in turn affect the costs or availability of funding for entities like us. If this economic downturn continues or there are otherwise prolonged disruptions to the credit markets, this could limit our ability to raise funds from our current or other funding sources or cause the funds to become more expensive, either of which may materially and adversely affect our business, financial condition, results of operations and prospects. Our sales may decline as a result of such tightening of banks' lending policies and credit conditions, and our business, liquidity, financial condition, results of operations and prospects may be materially and adversely affected.

### We had net current liabilities as of December 31, 2009.

We had net current liabilities of approximately RMB2,654.0 million as of December 31, 2009. As of December 31, 2010 and 2011 and June 30, 2012, we had net current assets of approximately RMB2,838.2 million, RMB3,654.5 million and RMB3,555.7 million (US\$559.7 million), respectively.

We may have net current liabilities in the future. Having significant net current liabilities could constrain our operational flexibility as well as adversely affect our ability to expand our business. If we do not generate sufficient cash flow from our operations to meet our present and future financial needs, we may need to rely on external borrowings for funding. If adequate funds are not available, whether on satisfactory terms or at all, we may be forced to delay or abandon our development and expansion plans, and our business, financial condition and results of operations may be materially and adversely affected.

# During 2009, we financed our operations in part through significant amounts due to related parties that were interest free. We may face increasing finance costs in the future. If we fail to manage our finance costs effectively, our business, financial condition and results of operations will be materially and adversely affected.

During 2009, we financed our operations in part through significant amounts due to related parties that were interest free. Our amounts due to related parties were approximately RMB3,646.8 million (inclusive of liabilities associated with assets held for sale) as of December 31, 2009. Our amounts due to related parties as of December 31, 2009 were interest free. These amounts included certain bills not set to mature until a later date that we received from third parties and endorsed to our related parties which, in total, amounted to approximately RMB599.9 million as of December 31, 2009. We had subsequently repaid all such amounts. If we had paid interest at the effective weighted average annual rate for our bank loans, which was 4.88% per annum for 2009, on these amounts due to our related parties as of December 31, 2009, our finance costs would have increased by approximately RMB128.8 million during the same period.

Our operations require significant amounts of capital and we will not be able to rely on amounts due to related parties in the future to finance our operations. Due to the austerity measures imposed by the PRC government, the average PBOC benchmark interest rate had increased five times from October 2010 to December 2011. Should we be unable to find sufficient sources of capital to finance our operations and on suitable terms, including at acceptable rates of interest, our business, financial condition and results of operations will be materially and adversely affected.

### We face intense competition in China.

The industry in which we operate is highly competitive. Players in this industry generally compete with each other on factors such as reliability and quality of products, pricing, location of manufacturing site, time-to-market and available capacity. Some of our competitors may have longer track records and greater

financial and other resources. There can be no assurance that we can continue to compete successfully in the future. In the event that we are unable to compete with other market players effectively, our business, financial condition, results of operations and prospects will be materially and adversely affected.

### Our production capacity may not correspond precisely to our production demands.

On occasion, customers may require unusually rapid increases in output beyond our production capacity, and we may not have sufficient capacity at any given time to meet sharp increases in our customers' requirements. As a result, we may lose our customers and our reputation may be damaged. In addition, in the event that a customer reduces, defers or cancels its purchase orders after we have invested in increasing our capacity, our profit margins and financial condition may be adversely affected because we may not be able to recover our expenditures for inventory purchased in preparation for customer orders and we may not be able to realize optimal asset utilization of our aluminum manufacturing facilities.

### Our future success depends in part on our ability to retain our executive Directors and senior management.

Our future success depends significantly on the continuing services of our executive Directors and senior management of our Group, in particular, Mr. Zhang Bo, our executive Director and chief executive officer. Mr. Zhang Bo is critical to the development of our business and strategic direction. If any member of our executive Directors and senior management, whose names are set out in the section headed "Directors and Senior Management" in this document, is unable or unwilling to continue in his or her present positions, we may not be able to replace such member easily in a timely manner or at all, or we may incur additional expenses to recruit, train and retain personnel. Moreover, if any of these key personnel joins a competitor, we may lose customers, suppliers and know-how as well as other key professionals and staff members. The loss of any key personnel by our Group could have a material adverse effect on our business, financial condition and results of operations.

### Our results of operations may fluctuate from period to period.

Our results of operations are subject to significant fluctuations. Some material factors affecting our results of operations include, but are not limited to:

- alterations in demand for our aluminum products;
- our customers' sales outlook, purchasing patterns and changes in inventory level;
- our effectiveness in managing the manufacturing processes and controlling costs;
- our ability to optimize our available manufacturing capability;
- changes in the cost and availability of raw materials and electricity, which frequently occur in our industry and which affect our margins and our ability to meet delivery schedules;
- our ability to obtain financing in a timely manner; and
- local conditions and events that may affect our production volumes, such as labor conditions, stability of electricity supply, political instability and local holidays.

Due to the factors mentioned above and other risks discussed in this section, many of which are beyond our control, our results of operations may fluctuate from period to period.

## The interests of Mr. Zhang, our chairman and Controlling Shareholder, may differ from those of our Group and our investors, and Mr. Zhang has the ability to cause us to make decisions that may not be in the best interests of our investors.

Mr. Zhang, our chairman and Controlling Shareholder, currently beneficially owns approximately 84.96% of the issued share capital of our Company. As such, Mr. Zhang has, and will continue to have, substantial influence over our business. We cannot assure you that Mr. Zhang will not cause us to enter into transactions or take, or fail to take, other actions or make decisions that conflict with the interests of our investors.

#### We may not be able to adequately protect our intellectual property rights.

Our success depends in part upon our intellectual property rights and know-how. However, we may not be able to adequately protect such intellectual property rights. In addition, any attempt to enforce our intellectual property rights, even if successful, could result in costly and prolonged litigation, divert our management's attention and adversely affect our financial performance. Failure to adequately protect our intellectual property may materially and adversely affect our results of operations as our competitors would be able to utilize such property without having to incur the costs of developing it, thus potentially reducing our relative profitability. Also, if we fail to effectively protect our brand name from inappropriate use by third parties in ways that adversely affect on our business, financial condition and results of operations.

### Product liability claims against us could result in significant costs or negatively affect our reputation and could materially and adversely affect our business, financial condition and results of operations.

As of June 30, 2012, we had not been exposed to any product liability claims. However, we cannot assure you that we will not experience material losses arising from product liability claims in the future. We do not maintain any product liability insurance. If our products fail to meet the required specifications or quality standards, our business could be materially and adversely affected. We may also face liability claims due to possible defective products. Such claims may be pursued by way of contractual remedy or by way of civil action if the defects in our products result in damages or injuries suffered by third parties. In such event, our reputation and our business, financial condition and results of operations would be materially and adversely affected.

#### We may not have sufficient insurance coverage for the risks associated with our business operations.

Risks associated with our production include damage to production facilities, environmental pollution, transportation damages and delays, industrial damages and risks posed by natural disasters, any or all of which may result in losses to us. We may also be unable to obtain or maintain insurance policies covering risks associated with natural disasters, business interruption or environmental damages arising from our production activities. In addition, we do not have any product liability insurance. Therefore, if we incur any loss which is not covered by our insurance policies, or the compensated amount is significantly less than our actual loss, our financial condition and results of operations could be adversely affected.

#### Our accounting and corporate disclosure standards may differ from those in other jurisdictions.

We prepare and present our consolidated financial statements in accordance with IFRS, which differ in certain significant respects from those applicable to companies in certain other countries including the United States. We have not identified the differences between IFRS and those accounting principles generally accepted in the United States or other jurisdictions, or quantified the effect of applying generally accepted accounting principles in the United States or other jurisdictions on our financial information.

Investors must make their own judgment in assessing financial information included in our consolidated financial statements, and should consult their own professional advisors if necessary to understand the difference between IFRS and generally accepted accounting principles in the United States or other jurisdictions, and how those differences would affect our financial information.

#### **Risks Relating to Our Industry**

### Future changes in laws, regulations or enforcement policies in China could adversely affect our business.

Laws, regulations and enforcement policies in China, including those regulating the aluminum industry, are evolving and are subject to future changes. These changes could impact the business of Chinese aluminum product manufacturers. For example, Chuangye Group obtained the approval to construct several

electrolytic aluminum production lines during 2001 and 2002. However, in April 2004, the State Council launched a nationwide review of fixed-asset investment in the PRC. As a result, Chuangye Group did not launch the operations of these production lines after their trial production in 2004, and the operation of these production lines did not commence until they were sold to our Group in September 2006. We cannot assure you that similar actions will not be taken by the relevant PRC regulatory authorities in the future or that such actions, when taken, will not adversely impact our business. Furthermore, different regulatory authorities may have different interpretation and enforcement of the aluminum industry policies, which requires companies to meet the policies requirements issued by relevant regulatory authorities from time to time, and obtain approvals and complete filings in accordance with the relevant regulatory authorities' interpretation and enforcement of such policies.

As of June 30, 2012, we had an aggregate designed capacity of approximately 1,776,000 tons of aluminum products at our Zouping, Weiqiao, Binzhou and Huimin manufacturing bases. In addition, we are in the process of increasing the production capacity of our manufacturing bases. According to a confirmation letter issued on June 24, 2010 by the competent government authority in Shandong Province, we had at the time of our Listing obtained all required approvals and permits and completed all required filings for our existing projects and projects under construction, and our operations have been in compliance with relevant laws, regulations and policies in the PRC. Our PRC Legal advisors, Zong Heng Law Firm, have also confirmed to us that, in respect of our existing projects and projects under construction, we have obtained the required approvals and permits and completed the required filings in all material respects, and our operations have been in compliance with relevant laws, regulations and policies in the view that, if applicable laws and regulations change adversely or the relevant regulatory authorities change their interpretation or enforcement of relevant policies in the future, we may be required to obtain further approvals or to meet other additional regulatory requirements. In addition, we may not be able to access the credit markets or obtain financing through corporate debt, commercial paper, medium-term notes, convertible bonds or equity issuances under the current industry policies.

If there are any future changes in applicable laws, regulations, administrative interpretations or regulatory documents, or stricter enforcement policies by the relevant PRC regulatory authorities, more stringent requirements could be imposed on the industry in which we are currently engaged. Compliance with such new requirements could impose substantial additional costs or otherwise have a material adverse effect on our business, financial condition and results of operations. In addition, if we fail to meet such new rules and requirements relating to approval, construction, environmental or safety compliance of our operations, we may be ordered by the relevant PRC regulatory authorities to change, suspend construction of or close the relevant production facilities. Alternatively, these changes may also relax some requirements, which could be beneficial to our competitors or could lower market entry barriers and increase competition. As a result, our business, financial condition and results of operations could be materially and adversely affected.

### Our business involves inherent risks and occupational hazards, which could harm our reputation, subject us to liability claims and cause us to incur substantial costs.

Our business involves inherent risks and occupational hazards. Due to the nature of our business, we engage or may engage in certain inherently risky and hazardous activities, including, among others, operations which involve preparing and handling high temperature materials, the production, handling and use of high voltage electricity, the transportation of hazardous products and handling hazardous materials in our operations. We are subject to the risks associated with these activities, including spillage of high temperature materials, equipment failures, industrial accidents, fires and explosions. These risks and hazards may result in personal injury and loss of life, damage to or destruction of properties or production facilities, and pollution and other environmental damage.

We cannot assure you that the same will not happen at our manufacturing bases in the future. Any of these risks could result in business interruption, possible legal liability and damage to our business reputation and corporate image. In addition, we may also be subject to claims resulting from the subsequent use by our customers or other third parties of the products we have produced. If any of the above happens, our business, financial condition and results of operations would be materially and adversely affected.

## Certain facts and other statistics with respect to China, the PRC economy and the global and PRC aluminum industries in this document are derived from various official government sources and may not be reliable.

Certain facts and other statistics in this document relating to China, the PRC economy and the global and PRC aluminum industries and related markets have been derived from various official government publications. However, we cannot guarantee the quality or reliability of such source materials. They have not been prepared or independently verified by us, the Initial Purchasers or any of their respective affiliates or advisors and, therefore, we make no representation as to the accuracy of such facts and statistics, which may not be consistent with other information compiled within or outside China. Due to possibly flawed or ineffective collection methods or discrepancies between published information and market practice and other problems, the statistics herein may be inaccurate or may not be comparable to statistics produced for other economies and should not be relied upon. Furthermore, we cannot assure you that such information is stated or compiled on the same basis or with the same degree of accuracy as may be the case elsewhere. In all cases, investors should give consideration as to how much weight or importance they should attach to or place on such facts or statistics.

#### **Risks Relating to Doing Business in the PRC**

### Changes in China's economic, political and social conditions could adversely affect our business, financial condition and results of operations.

We conduct all of our operations in China and derive all of our revenue from our operations in China. Accordingly, our business, financial condition, results of operations and prospects are materially affected by economic, political and social conditions in China. The PRC economy differs from the economies of most developed countries in many respects, including the extent of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. The PRC economy has grown significantly in recent years; however, we cannot assure you that such growth will continue. Recently, the PRC government has taken measures to tighten the control over bank lending. Any adverse change in the economic, political and social conditions or government policies in China could have a material adverse effect on overall economic growth, which in turn could lead to a reduction in demand for our aluminum products and consequently have a material adverse effect on our business, financial condition and results of operations.

#### Uncertainties with respect to the PRC legal system could have a material adverse effect on us.

We conduct all of our manufacturing operations through our operating subsidiaries in China, which are generally subject to laws and regulations applicable to foreign investment in China and, in particular, laws applicable to foreign-invested enterprises. The PRC legal system is based on written statutes. Prior court decisions may be cited for reference but have limited precedential value. Since 1979, PRC legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involve uncertainties, which may limit legal protections available to us. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

### Governmental control of currency conversion may affect the value of your investment.

The PRC government imposes controls on currency conversion between Renminbi and foreign currencies and, in certain cases, the remittance of currency out of and into China. We receive all of our revenue in Renminbi, which is currently not a freely convertible currency. Under our current corporate structure, income of our Company will be primarily derived from dividend payments from Shandong Hongqiao. Shortages in the availability of foreign currency may restrict the ability of Shandong Hongqiao to remit sufficient foreign currency to pay dividends to us, or otherwise satisfy its foreign currency-dominated obligations, which may in turn affect our ability to service the debt securities (if any). We also plan to transfer proceeds from our future fund raising activities (if any) into China to fund our business operations. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, can be made in foreign currencies without prior approval from SAFE by complying with certain procedural requirements. However, in most cases, particularly payments of capital account items, approval from appropriate PRC governmental authority is required where (i) Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of offshore bank loans denominated in foreign currencies, and (ii) any foreign currency is to be converted into Renminbi for investment in China. The PRC government may also at its discretion restrict access in the future to foreign currencies for current account transactions. In addition, the "Notice of SAFE on Issues Relating to Foreign Exchange Control on Fund Raisings by Domestic Residents Through Offshore Special Purpose Vehicles and Round-trip Investments" (國家外匯管理局關於境內居民通過境外特殊目的公司融資及返程投資外匯管理有關問題的通知), or the Circular 75, promulgated by SAFE, which came into force on November 1, 2005, applies to our Company and Mr. Zhang, the Controlling Shareholder of our Group. Mr. Zhang has completed the foreign exchange registration for its overseas investment under Circular 75 in 2010. If the foreign exchange control system prevents us from converting Renminbi into foreign currencies or vice versa, and obtaining sufficient Renminbi or foreign currency to satisfy our currency demands, our ability to transfer Renminbi to fund our business operations in China or to service our debt securities (if any) may be adversely affected.

Changes to the PRC tax laws have decreased the tax rate applicable to our business; however, any future changes to the PRC tax laws could adversely affect our business, financial condition and results of operations; we may be treated as a PRC tax resident enterprise and interest in respect of the debt securities (if any) and gain from the disposition of debt securities (if any) may be subject to PRC tax. On March 16, 2007, the National People's Congress of the PRC passed the New EIT Law, which took effect on January 1, 2008. On December 6, 2007, the PRC government also adopted the Implementing Rules of the Enterprise Income Tax Law, or the Implementing Rules, which also took effect on January 1, 2008. Under the New EIT Law, a unified EIT rate of 25% and unified tax deduction standards are applied to both domestic invested enterprises and foreign-invested enterprises, or FIEs. As a result, our effective tax rate of our continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012 was approximately 25.4%, 25.0%, 26.1% and 26.4% (including the 5% withholding tax on the proposed dividend distribution for 2011 that will be distributed in 2012), respectively. Under the New EIT Law, a 10% withholding tax is generally imposed on dividends distributed by FIEs to their foreign investors. In addition, the New EIT Law deems an enterprise established offshore but with "de facto management bodies" in the PRC to be a "resident enterprise" which is subject to the PRC EIT on its global income excluding dividends received from its PRC subsidiaries. In 2009 the State Administration of Taxation issued guidance regarding the determination of the location of the "de facto management bodies" for foreign enterprises that are controlled by PRC enterprises. However, it is unclear whether this guidance also reflects the State Administration of Taxation's criteria for determining the location of the "de facto management bodies" for foreign enterprises that are not controlled by PRC enterprises (such as our Company). We currently take the position that we are not a PRC resident enterprise for tax purposes. However, we cannot assure you that the tax authorities will agree with our position. All members of our management are currently located in the PRC, and we expect them to continue to be located in the PRC in the foreseeable future. If the PRC tax authorities determine that we should be classified as a resident enterprise, our global income, excluding dividends received from Shandong Hongqiao, will be subject to PRC income tax at a tax rate of 25%. PRC tax authorities in different districts may be inconsistent in classifying resident enterprises and non-resident enterprises. Either the imposition of withholding tax on dividends payable from Shandong Hongqiao to us or the imposition of PRC tax on our global income as a "resident enterprise" under the New EIT Law could have a material adverse effect on our business, financial condition and results of operations. Pursuant to the arrangement between the PRC government and the Hong Kong SAR, where a Hong Kong enterprise directly holds at least 25% of shareholding of a PRC enterprise, subject to certain approval and filing requirements, the withholding tax rate in respect to the payment of dividends by such PRC enterprise to such Hong Kong enterprise may be reduced to 5% if the Hong Kong enterprise is the beneficial owner of the income and the PRC authorities approve the reduced rate. Otherwise, the withholding tax rate is 10% for the relevant dividends. If we or any subsidiary guarantors of the debt securities (if any) are treated as a PRC resident enterprise, interest paid on the debt securities (if any) might be subject to 10% withholding tax and gains from the transfer of debt securities (if any) might be subject to 10% PRC tax. We will be required to pay Additional Amounts with respect to PRC withholding tax on interest payments, subject to certain exceptions.

### We face foreign exchange and conversion risks, and fluctuations in the value of the Renminbi may have a material adverse effect on your investment.

The value of the Renminbi against the US dollar and other currencies may fluctuate and is affected by, among other things, changes in the PRC's political and economic conditions. The PBOC issued a public notice on July 21, 2005 increasing the exchange rate of the Renminbi against the US dollar by approximately 2% to RMB8.11 per US\$1.00. Further to this notice, the PRC government has reformed its exchange rate regime by adopting a managed floating exchange rate regime based on market supply and demand with reference to a portfolio of currencies. Under this regime, the Renminbi is no longer pegged to the US dollar. We cannot predict how and to what extent the exchange rate of the Renminbi will fluctuate in the future. To the extent that we need to convert US dollars we receive from the offering into Renminbi for our operations, appreciation of the Renminbi against the US dollars, our business, financial condition and results of operations. Conversely, as we rely entirely on dividends paid to us by Shandong Hongqiao, any depreciation of the Renminbi may materially and adversely affect our ability to service our debt securities (if any).

#### We face risks related to health epidemics and other outbreaks.

Our business could be adversely affected by the effects of H1N1 flu, avian flu, Severe Acute Respiratory Syndrome, or SARS, or other epidemics or outbreaks. In 2006, 2007 and 2008, there have been reports on the occurrences of avian flu in various parts of China, including a few confirmed human cases and deaths. In April 2009, an outbreak of H1N1 flu occurred in Mexico and the United States and human cases of H1N1 flu were discovered in China and Hong Kong. Any prolonged occurrence or recurrence of H1N1 flu, avian flu, SARS or other adverse public health developments in China or any of the major markets in which we do business, or the fear of such development, may have a material adverse effect on our business and operations. These could include our ability to deliver our products, as well as temporary closure of our manufacturing facilities, or our customers' facilities, leading to delayed or cancelled orders. Any severe travel or shipment restrictions and closures would severely disrupt our operations and adversely affect our business, financial condition and results of operations.

### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial position and results of operations should be read in conjunction with our audited consolidated financial statements as of and for the three years ended December 31, 2009, 2010 and 2011 including the notes thereto and the unaudited consolidated financial statements as of and for the six months ended June 30, 2012 including the notes thereto, included elsewhere (or incorporated by reference) in this document. We have prepared our financial statements in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board.

In addition, our consolidated financial statements and the financial data included in this document reflect certain discontinued operations, namely, the dyeing business, the caustic soda manufacturing business and the alumina agency business, which we disposed of on January 4, 2010, January 1, 2010 and December 31, 2009, respectively. Information relating to these discontinued operations is presented separately in our Consolidated Statements of Comprehensive Income, as a separate line item after profit from continuing operations, before our profit and total comprehensive income.

The following discussion and analysis contain certain forward-looking statements that reflect our current views with respect to future events and financial performance. These statements are based on our assumptions and analysis in light of our experience and perception of historical trends, current conditions and expected future developments, as well as other factors we believe are appropriate under the circumstances. However, actual outcome and developments are subject to a number of risks and uncertainties. Factors that could cause or contribute to such differences include those discussed in the section headed "Risk Factors" in this document.

### Overview

We are the fourth-largest aluminum product manufacturer in China. We have vertically integrated operations that cover the entire aluminum industry value chain consisting of production facilities for alumina, molten aluminum alloy and aluminum alloy ingot, aluminum fabrication production facilities as well as power generation facilities.

We believe that we enjoy sustainable profitability because of our vertically integrated business model, our cost advantages and high operational efficiency and through centralized procurement of raw materials and electricity locally. We are strategically headquartered in Zouping County, Shandong Province, within an end-to-end industrial aluminum production cluster that includes Gaoxin, our primary raw material supplier, and local down-stream users, which we believe provides us with substantial cost and operational advantages and results in other synergies. All of our manufacturing bases and our main electricity and alumina supplier, Gaoxin, are in close geographic proximity to each other (within 80 km of each other) and are connected by our in-house power supply grid. We are connected to other major production bases of downstream aluminum fabrication products, such as Henan Province, Liaoning Province and Jiangsu Province, and major alumina production bases and coal resources in Shandong Province, Shanxi Province and Henan Province, through developed transportation networks.

We currently have four manufacturing bases, one located in Zouping, one in Weiqiao, one in Binzhou and one in Huimin. Our weighted average production capacity of aluminum products was approximately 738,973 tons, 970,496 tons, 1,507,916 tons and 836,792 tons for the three years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, with utilization rates of approximately 98.3%, 110.9%, 105.7% and 107.3%, respectively, during the respective periods. As of June 30, 2012, we had an annual designed capacity of 1,776,000 tons. We expect our designed production capacity of aluminum products to reach 2 million tons per year by the end of 2012.

Our aluminum products consist of molten aluminum alloy, aluminum alloy ingots, aluminum alloy casting-rolling products and aluminum busbars. We began manufacturing aluminum products in 2006 by using self-manufactured primary aluminum. Our aluminum products are made from alumina and carbon anodes through a smelting process by means of electrolytic reduction.

We have achieved significant growth in our sales volume of aluminum products since our inception. We sold approximately 731,043 tons, 1,064,775 tons, 1,585,810 tons and 895,565 tons of aluminum products for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, and generated revenue of approximately RMB8,668.4 million, RMB14,453.9 million, RMB22,928.4 million and RMB12,251.1 million (US\$1,928.4 million) for these periods from sales of aluminum products. During the same periods, we achieved net profit of approximately RMB567.6 million, RMB4,220.2 million, RMB5,875.4 million and RMB2,840.4 million (US\$447.1 million), respectively.

The following table sets forth the sales volume, revenue, average selling price of, and percentage of our revenue derived from, each type of our products for the periods indicated:

	Year ended December 31,												
		20	109			2010				2011			
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	
Aluminum products													
Molten aluminum													
alloy	445,614	5,334.5	11,971	61.5%	903,099	12,204.1	13,514	80.7%	1,173,652	16,972.4	14,461	71.8%	
Aluminum alloy													
ingot	278,270	3,243.7	11,657	37.5%	157,240	2,183.0	13,883	14.4%	405,347	5,845.6	14,421	24.7%	
Aluminum busbar.	7,159	90.2	12,609	1.0%	4,436	66.8	15,059	0.4%	6,348	103.0	16,225	0.4%	
Aluminum alloy casting-rolling													
products									463	7.4	15,983	0.1%	
Subtotal	731,043	8,668.4	11,858	100.0%	1,064,775	14,453.9	13,575	95.5%	1,585,810	22,928.4	14,458	97.0%	
Steam	-		-		5,105,024	677.7	133	4.5%	5,255,568	697.6	133	3.0%	
Total		8,668.4		100.0%		15,131.6		100.0%		23,626.0		100.0%	

		Six months ended June 30,									
		20	11		2012						
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue			
Aluminum products											
Molten aluminum alloy	585,170	8,448.0	14,437	74.5%	596,269	8,047.5	13,496	63.9%			
Aluminum alloy ingot	175,471	2,506.3	14,283	22.1%	285,887	4,004.1	14,006	31.8%			
Aluminum busbar	2,077	32.8	15,792	0.3%	7,097	107.1	15,091	0.9%			
Aluminum alloy casting-rolling											
products					6,312	92.4	14,635	0.7%			
Subtotal	762,718	10,987.1	14,405	96.9%	895,565	12,251.1	13,680	97.3%			
Steam	2,623,080	348.2	133	3.1%	2,601,466	345.3	133	2.7%			
Total		11,335.3		100.0%		12,596.4		100.0%			

Molten aluminum alloy is our major product, the sales of which accounted for approximately 61.5%, 84.4%, 74.0% and 65.7% of our revenue derived from aluminum products for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Compared with the production of aluminum alloy ingots, the production of molten aluminum alloy allows us to avoid incurring molding and other relevant costs. By purchasing molten aluminum alloy, our customers minimize transportation costs and save the cost of smelting or reheating aluminum alloy ingots for further processing, including the related equipment, labor and storage costs. We are able to provide our customers with molten aluminum alloy due to our close proximity to them, which, we believe, provides us with significant cost and operational advantages and results in other synergies.

We benefit from arrangements in relation to the key inputs into our aluminum products. Primarily, these include (i) cost advantages from the production of a significant amount of the electricity that we use for the production of our aluminum products at our thermal power stations, (ii) our in-house power grid connecting our four manufacturing bases, (iii) cost advantages from purchasing off-grid electricity from Gaoxin, (iv) pricing discounts resulting from our bulk purchases of alumina from our principal supplier of alumina, Gaoxin and (v) cost advantages from the production of a portion of the alumina we use in our manufacturing in-house. In 2010, 2011 and for the six months ended June 30, 2012, we produced 55.1%, 44.0% and 55.1%, respectively, of the electricity we used in our production of aluminum products at our thermal power stations. We produced this electricity at a cost below the purchase price of electricity that we purchase externally. The remainder of our electricity requirements were purchased from Gaoxin pursuant to a direct power supply agreement and delivered via our in-house power grid. Our purchases of electricity from Gaoxin accounted for approximately 66.5%, 88.8% and 89.2% of its total electricity output for 2010 and 2011 and the six months ended June 30, 2012, respectively. Due to our off-grid structure and bulk purchases, we have been able to purchase our electricity from Gaoxin at a cost below average on-grid electricity prices. Moreover, we purchased approximately 47.8%, 58.8% and 50.9% of the total volume of alumina sold by Gaoxin for 2010 and 2011 and the six months ended June 30, 2012, respectively. Due to the significant volume of alumina that we purchase from Gaoxin and Gaoxin's close proximity to our operations, we believe that we have been able to negotiate price discounts with respect to such alumina purchases. Gaoxin is an independent third party, in which the Labor Union Committee of Shandong Zouping Economic Development Zone holds substantially all of the beneficial interest. It had an aggregated designed annual production capacity of 4.0 million tons of alumina as of June 30, 2012. In 2012, we constructed facility to produce alumina in-house. During the six months ended June 30, 2012, we produced approximate 26.3% of the alumina supply for our manufacturing from our self-owned facility and we believe that we enjoy cost savings from producing our alumina in-house.

We sell all of our aluminum products to domestic customers, who are located mainly in Shandong Province as well as in other regions of China, such as in Northeastern, Southern, Eastern and Northern China. Our customers include downstream aluminum fabrication product manufacturers, who process our aluminum alloy products into aluminum fabrication products, and traders, who in turn resell our aluminum products to downstream aluminum fabrication products are or other traders. For the six months ended June 30, 2012, all of our molten aluminum alloy customers were located within 30 kilometers from us. Approximately 63.9% of our revenue for the six months ended June 30, 2012 was derived from the sales of molten aluminum alloy.

#### **Basis of Presentation**

Our Company was incorporated in the Cayman Islands on February 9, 2010. In March 2010, we underwent the Reorganization in anticipation of our IPO (which was in March 2011), pursuant to which our Company became the holding company of the companies now comprising our Group. The Group comprising the Company and its subsidiaries resulting from the Reorganization has been regarded as a continuing entity for accounting purposes. Our consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows are prepared as if our Company had been the holding company of the companies in our Group throughout the three years ended December 31, 2011 and the six months ended June 30, 2012. Our consolidated statements of financial position as of December 31, 2009, 2010 and 2011 and June 30, 2012 present the assets and liabilities of the companies now comprising our Group as of the respective dates as if our Company had been the holding company of Shandong Hongqiao at those dates.

#### **Principal Factors Affecting Our Results of Operations**

Our financial condition and results of operations have been, and are expected to continue to be, affected by a number of factors, including the following:

- demand for and the prices of aluminum products;
- the expansion of our production capacity;
- the prices of raw materials;
- electricity and coal prices;
- the business environment in the PRC; and
- the success of our advanced aluminum fabrication products.

### Demand for and prices of aluminum products

We derive a substantial majority of our revenue from the sale of aluminum products. As a result, our operating results are directly affected by the demand for and the price of aluminum products. Aluminum product prices have historically been subject to fluctuations in response to market forces, such as global mine production, roasting and smelting production, global and PRC economic conditions and industrial demand. In recent years, there have been significant movements in aluminum prices. See "Industry Overview - Price - Historical price overview." These movements have been driven by the end-use of aluminum products in construction, electrical, transport and consumer durables. We determine our selling price of aluminum products, including our advanced aluminum fabrication products, based on the spot market price<sup>1</sup>, which was mainly driven by the demand for and supply of the aluminum products in the PRC. As we derive a majority of our revenue from sales of aluminum products, demand for and the purchase prices of our aluminum products significantly affect our financial condition and results of operations. For example, for 2009, the average selling price of our aluminum products per ton was approximately RMB11.858. The relatively low average selling price for 2009 was primarily due to the global financial crisis and the resulting slowdown of the PRC economy that started in the second half of 2008. Partly as a result of the above, our gross profit margin of continuing operations was 10.4% for 2009. The average selling price of our aluminum products increased to RMB13,575 per ton for 2010 and further to RMB14,458 per ton for 2011, which increases were primarily driven by the recovery of the PRC economy. The average selling price of our aluminum products was RMB13,680 (US\$2,153.3) per ton for the six months ended June 30, 2012. Accordingly, our gross profit margin of continuing operations increased significantly to approximately 37.9% for 2010, 34.6% for 2011 and 32.3% for the six months ended June 30, 2012. Such significant increases in our gross profit margin for 2010 and 2011 compared to the year of 2009 were primarily due to increases in the average selling prices of our aluminum products. After the price of aluminum rallied in early 2011, it has decreased since August 2011 primarily due to the economic crisis in Europe. Although the PRC economy has gradually recovered, any future slowdown of the PRC economy could result in reduced demand or reduced growth in demand, for aluminum and, in turn, reductions in the price of aluminum and the prices of our aluminum products, which could have an adverse effect on our business, financial condition and results of operations.

As disclosed under the sub-paragraph "Sales contract term" of the section headed "Business" in this document, for our products sold in China other than Guangdong Province, the price is determined with reference to the mean price provided by the Yangtze River Non-ferrous Metals Spot Market, and for products sold in Guangdong Province, the price is based on the mean price provided by Nanchu Non-ferrous Metals Spot Market in Guangdong Province, while a premium or discount may be applied from time to time.

The following table shows selected historical operating data with respect to the sales of our aluminum products for the periods indicated:

	For the y	year ended Decer	nber 31,	Six months ended June 30,		
	2009	2010	2011	2011	2012	
Sales volume (tons) Average selling price (RMB per	731,043	1,064,775	1,585,810	762,718	895,565	
ton)	11,858	13,575	14,458	14,405	13,680	
Revenue (RMB in millions)	8,668.4	14,453.9	22,928.4	10,987.1	12,251.1	

### Expansion of our production capacity

Our production capacity has expanded significantly in recent years. The following table sets forth information relating to our weighted average aluminum production capacity for the three years ended December 31, 2009 and 2010 and 2011, and the six months ended June 30, 2011 and June 30, 2012 and our production volume for the same periods:

	Year e	nded December	31,	Six months June 3	
	2009	2010	2011	2011	2012
Weighted average production					
capacity (tons)	738,973 <sup>(1)</sup>	970,496 <sup>(1)</sup>	$1,507,916^{(1)}$	735,013 <sup>(1)</sup>	836,792 <sup>(1)</sup>
Production volume (tons)	726,192	1,076,196	1,594,193	766,019	898,296
Utilization rate <sup>(2)</sup>	98.3%	110.9%	105.7%	104.2%	107.3%

(1) The weighted average production capacity for each period is the result of (i) the total sum of the designed annual production capacity of each of our production lines multiplied by the months in that period that such production line possessed such capacity (ii) divided by 12 for each of the three years ended December 31, 2011 and six months ended June 30, 2011 and 2012.

(2) Utilization rate is calculated by dividing the production volume for the relevant period by the weighted average designed annual production capacity as of the end of the relevant year.

We believe that the increases in our production capacity have strengthened our market position and enhanced our competitiveness in the market. As of June 30, 2012, we had an aggregate designed annual production capacity of 1,776,000 tons of aluminum products and ranked fourth among Chinese aluminum producers in terms of designed production capacity, according to Antaike. See "Business – Our Production Facilities" for more details about our expansion plan.

### Prices of raw materials

Purchase of raw materials is a major component of our cost of sales, representing approximately 41.8%, 56.3%, 55.3% and 50.3% of our total cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012 respectively. As a result, our business, financial condition and results of operations are affected by movements in raw material prices.

The principal raw material used in our production is alumina and it is one of the principal components of our cost of goods sold, accounting for approximately 73.4%, 64.7%, 66.6% and 71.0% of our total purchase of raw materials for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. In 2009, we purchased all of our alumina from Chuangye Group for a total of approximately RMB2,382.3 million, accounting for approximately 30.7% of the cost of sales of our aluminum products for that year. In December 2009, Chuangye Group sold its alumina production facilities to Gaoxin. We entered into a three-year alumina supply agreement with Gaoxin in December 2009 which has been extended to December 31, 2015 by supplemental agreements, which provides that the base price of alumina for each year is determined with reference to the sales price of alumina supplied by Gaoxin to other independent third parties in early January of that year. In addition, as long as we meet certain conditions, Gaoxin agreed to
offer us price discounts which will be determined through negotiations. Gaoxin was our sole alumina supplier from January 2010 to March 2011. For 2010 and 2011 and the six months ended June 30, 2012, our purchase of alumina amounted to approximately RMB3,421.0 million, RMB5,689.6 million and RMB3,045.9 million (US\$479.4 million), respectively, accounting for approximately 36.4%, 36.8% and 35.7%, respectively, of our cost of sales for the same periods. An increase in the prices of alumina would negatively impact our gross margins if we are not able to offset such price increase through increases in the selling prices of our aluminum products.

For 2009, Chuangye Group sold alumina to us at production cost. For 2010 and 2011, Gaoxin sold alumina to us at a discount from the sales price of alumina it sold to other independent third parties. As the pricing mechanisms of alumina provided by Chuangye Group and Gaoxin are different, our historical raw materials cost and product cost structure may not be indicative of our raw materials cost and product cost structure in the future. As a result, investors may have difficulties in evaluating our business and prospects because our historical performance may not be indicative of our business, financial condition and results of operations in the future. See "- Quantitative and Qualitative Disclosure about Market Risk - Aluminum products selling price risk" for more details. Gaoxin was our sole alumina supplier from January 2010 to March 2011. In 2011, we entered into a supply contract with an independent alumina supplier based in Qingdao, pursuant to which we agreed to purchase 250,000 tons of alumina from April 2011 to December 2012, at a price per ton determined based on the average selling price of alumina from the previous month net of a discount. During the first six months of 2012, we constructed facilities to make use of coal fly ash, including an in-house alumina production facility with an aggregate annual production capacity of up to 2,000,000 tons of alumina. The alumina we produced at our new in-house production facility accounted for approximately 26.3% of the total alumina for our manufacturing during the six months ended June 30, 2012 and is expected to satisfy at least 45% of our total alumina needs for the six months ending December 31, 2012.

The following table sets forth our average purchase price of alumina from Chuangye Group for 2009 and from Gaoxin for 2010, 2011 and the six months ended June 30, 2012, and the average spot market price of alumina in China, according to Antaike, for the periods indicated:

	Year o	ended December	Six months ended June 30,			
	2009	2010	2011	2011	2012	
	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	
Chuangye Group	1,712	_	_	_	_	
Gaoxin Average spot market price of	_	1,621	1,870	1,795	1,836	
alumina (not including taxes) in						
China	2,000	2,350	2,308	2,332	2,252	

Our purchase price of alumina provided by Chuangye Group was RMB1,712 per ton for 2009. According to Antaike, the average spot price of alumina (not including taxes) in China increased to RMB2,350 per ton for 2010 and RMB2,308 per ton for 2011 from RMB2,000 per ton for 2009, which was primarily due to the strong market demand for alumina in the PRC. The average spot price of alumina (not including taxes) in China was RMB2,252 per ton for the six months ended June 30, 2012. On the other hand, our average purchase price of alumina decreased to RMB1,621 per ton for 2010 from RMB1,712 per ton for 2009. Our Directors believe that such decrease in our average purchase price of alumina for 2010 was primarily due to the alumina supply agreement with Gaoxin. In addition, our Directors believe that the volume of alumina for 2010 helped Gaoxin improve the utilization rate of its alumina production facilities. However, our average purchase price of alumina increased to RMB1,874 per ton for 2011 from RMB1,621 per ton for 2010 due to a price adjustment mechanism in our alumina purchase agreement with Gaoxin, triggered by an increase in the average selling price of alumina to other

independent third parties from Gaoxin in the second half of 2010 and the relatively higher price we paid for the alumina we purchased from our new alumina supplier in Qingdao. Our average purchase price of alumina was RMB1,844 per ton for the six months ended June 30, 2012. Due to our arrangements with Chuangye Group and Gaoxin described above, our average purchase prices of alumina from Chuangye Group and Gaoxin were lower than the average spot market prices of alumina in China during the three years ended December 31, 2011 and the six months ended June 30, 2012.

## Electricity and coal prices

Electricity is also one of the principal cost components in manufacturing our aluminum products. Our aluminum production process requires a stable supply of electricity in large quantities. Our electricity cost, including the cost of coal used to generate electricity, was approximately RMB3,870.9 million, RMB3,483.0 million, RMB5,674.5 million and RMB3,102.4 million (US\$488.3 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, accounting for approximately 49.8%, 37.1%, 36.7% and 36.4% of our cost of sales during the same periods. Therefore, the price of electricity directly affects our cost of sales and, consequently, our profit margins and results of operations.

During the three years ended December 31, 2011 and the six months ended June 30, 2012, the majority of our externally sourced electricity was purchased from Chuangye Group and Gaoxin. See "Business – Electricity Supply." We expect to continue to purchase a substantial amount of electricity.

The following table sets forth our average electricity purchase price and the cost of electricity generated in-house for the periods indicated.

	Year	ended December	Six months ended June 30,			
	2009	2010	2011	2011	2012	
	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)	
Average electricity purchase price Cost of electricity generated in-	0.442 <sup>(1)</sup>	0.291 <sup>(2)</sup>	0.291 <sup>(2)</sup>	0.291	0.291	
house	0.293	0.201	0.227	0.217	0.227	

(1) The average electricity prices for 2009 also include the amortization of construction cost of the power grid by Gaoxin.

(2) Our average purchase price of electricity for 2010 and 2011 was lower than that of 2009, which was primarily due to the fact that the construction cost for the power grid connecting our facilities to Gaoxin's generators was fully amortized by the end of 2009, and that the price of the electricity purchased by us from Gaoxin for 2010, 2011 and the six months ended June 30, 2012 was lower than the price of electricity purchased by us from Chuangye Group for 2009.

To secure a stable electricity supply, we commenced the construction of our own thermal power stations in 2005, which started to supply electricity to us in January 2007. As of June 30, 2012, our thermal power stations had an annual aggregate capacity of 2,070 MW. Of our total electricity consumption volume for 2009, 2010 and 2011 and the six months ended June 30, 2012, approximately 30.1%, 55.1%, 44.0% and 55.1%, respectively, was generated by our own thermal power stations. It generally costs less to generate electricity with our power station than to purchase electricity from external suppliers. The cost of electricity generated in-house was approximately RMB917.4 million, RMB1,591.3 million, RMB2,161.0 million and RMB1,534.4 million (US\$241.5 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. In addition, we started to sell steam produced by our thermal power stations to Gaoxin on January 1, 2010. The revenue from the sale of steam was approximately RMB677.7 million, RMB697.6 million and RMB345.3 million (US\$54.3 million) for 2010 and 2011 and the six months ended June 30, 2012, accounting for approximately 4.5%, 3.0% and 2.7%, respectively of our revenue of continuing operations during the same periods.

Coal prices directly affect our electricity generation cost and the cost of the electricity we purchase. Coal prices declined significantly in late 2008 due to the global economic downturn, but then stabilized and gradually increased in 2010 and 2011. Any significant increase in coal prices in the future would increase

our electricity generation cost and our electricity cost and could materially and adversely affect our profit margins and results of operations. We purchased coal in an aggregate amount of approximately RMB869.1 million, RMB1,943.8 million, RMB2,467.3 million and RMB1,552.0 million (US\$244.3 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. The average coal consumption cost per ton for 2009, 2010 and 2011 and the six months ended June 30, 2012 were approximately RMB500, RMB587, RMB647 and RMB627 (US\$98.7), respectively. Our coal is purchased through competitive bidding between a number of coal suppliers, primarily located near Shandong Province, except that we purchased coal with a total price of approximately RMB442.1 million from Chuangye Group for 2009, which was priced at the then prevailing market price and accounted for approximately 50.9% of the amount of coal we purchased in 2009. See "– Quantitative and Qualitative Disclosure about Market Risk – Commodity and electricity purchase price risk" for more details.

### The business environment in the PRC

We derive our revenue primarily from sales of aluminum products in China. Economic growth in China has a direct impact on virtually all aspects of our operations, including particularly the level of demand for our products, the availability and prices of our raw materials, costs of electricity and coal and our other operating expenses. The slowdown of the PRC economy resulting from the global economic downturn in the second half of 2008 caused aluminum prices in China to decline significantly during the second half of 2008, which gradually rebounded since the beginning of 2009. Although the PRC economy gradually recovered since 2010, any adverse change in the business environment in the PRC could materially and adversely affect our results of operations. For example, after the aluminum price rallied in early 2011, the price has decreased since August 2011 due to the economic crisis in Europe and its impact on the PRC economy. See "Risk Factors – Risks Relating to Our Business – The global financial crisis which commenced in 2008 and the recent economic crisis in Europe have had a negative impact on the global economy, including the aluminum industry. If the economic downturn continues, it may materially and adversely affect our business, liquidity, financial condition, results of operations and prospects."

### The success of our advanced aluminum fabrication products

We are expanding our advanced aluminum fabrication products production capacity. Going forward, our results of operations will be significantly affected by the success of our advanced aluminum fabrication products production, including, but not limited to the quality of our advanced aluminum fabrication products and the efficiency of our downstream operations, our success in marketing our advanced aluminum fabrication products and general demand and pricing trends for our advanced aluminum fabrication products.

## **Critical Accounting Policies and Estimates**

Some of our accounting policies involve subjective assumptions and estimates, as well as complex judgments relating to accounting items. In each case, the determination of these items requires management judgments based on information and financial data that may change in future periods. When reviewing our financial statements, you should consider (i) our selection of critical accounting policies; (ii) the judgment and other uncertainties affecting the application of such policies; and (iii) the sensitivity of reported results to changes in conditions and assumptions. We set forth below those accounting policies that we believe involve the most significant estimates and judgments used in the preparation of our financial statements.

#### **Revenue** recognition

Revenue is measured at the fair value of the consideration received or receivable and represents amounts receivable for goods sold and services provided in the normal course of business, net of discounts.

Revenue from sale of goods is recognized when the goods are delivered and title has passed.

Service income is recognized when the services are provided.

Deposits received from customers prior to meeting the above criteria for revenue recognition are included in the consolidated statement of financial position under current liabilities. Interest income from a financial asset is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts the estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

## Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of the assets' (disposal groups') previous carrying amount and fair value less costs to sell.

#### Inventories

Inventories are stated at the lower of cost and net realizable value. Cost comprises direct materials and, where applicable, directs labor costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Cost of raw materials other than coal and alumina is calculated using the first-in, first-out method while cost of coal, alumina and other inventories are calculated using the weighted average method. Net realizable value represents the estimated selling price less all estimated costs to completion and costs to be incurred in marketing, selling and distribution.

### Impairment of tangible and intangible assets

At the end of each reporting period, we review the carrying amounts of our tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss, if any. Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

#### Property, plant and equipment

Property, plant and equipment including buildings held for use in the production or supply of goods or services, or for administrative purposes other than construction in progress are stated at cost less subsequent accumulated depreciation and accumulated impairment losses.

Depreciation is provided to write off the cost of items of property, plant and equipment other than construction in progress over their estimated useful lives and after taking into account of their estimated residual value, using the straight-line method.

Construction in progress includes property, plant and equipment in the course of construction for production or for its own use purposes. Construction in progress is carried at cost less any recognized impairment loss.

Construction in progress is classified to the appropriate category of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the item) is included in profit or loss in the period in which the item is derecognized.

### Description of the Major Components of Our Results of Operations

#### Continuing operations

### Revenue

We derive revenue primarily from sales of aluminum products, which accounted for all of our revenue for 2009, 95.5% of our revenue for 2010, 97.0% for 2011 and 97.3% of our revenue for the six months ended June 30, 2012. The following table sets forth the sales volume, revenue, average selling price and percentage of our total revenue derived from each of our molten aluminum alloy, aluminum alloy ingot, aluminum alloy casting-rolling products, aluminum busbars products and steam for the periods indicated:

		Year ended December 31,										
		20	09			20	)10			2011		
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue
Aluminum products												
Molten aluminum												
alloy	445,614	5,334.5	11,971	61.5%	903,099	12,204.1	13,514	80.7%	1,173,652	16,972.4	14,461	71.8%
Aluminum alloy												
ingot	278,270	3,243.7	11,657	37.5%	157,240	2,183.0	13,883	14.4%	405,347	5,845.6	14,421	24.7%
Aluminum busbar.	7,159	90.2	12,609	1.0%	4,436	66.8	15,059	0.4%	6,348	103.0	16,225	0.4%
Aluminum alloy casting-rolling												
products			-				-		463	7.4	15,983	0.1%
Subtotal	731,043	8,668.4	11,858	100.0%	1,064,775	14,453.9	13,575	95.5%	1,585,810	22,928.4	14,458	97.0%
Steam	-		-		5,105,024	677.7	133	4.5%	5,255,568	697.6	133	3.0%
Total		8,668.4		100.0%		15,131.6		100.0%		23,626.0		100.0%

		Six months ended June 30,								
		2	011			2012				
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue		
Aluminum products										
Molten aluminum alloy	585,170	8,448.0	14,437	74.5%	596,269	8,047.5	13,496	63.9%		
Aluminum alloy ingot	175,471	2,506.3	14,283	22.1%	285,887	4,004.1	14,006	31.8%		
Aluminum busbar	2,077	32.8	15,792	0.3%	7,097	107.1	15,091	0.9%		
Aluminum alloy casting-rolling										
products					6,312	92.4	14,635	0.7%		
Subtotal	762,718	10,987.1	14,405	96.9%	895,565	12,251.1	13,680	97.3%		
Steam	2,623,080	348.2	133	3.1%	2,601,466	345.3	133	2.7%		
Total		11,335.3		100.0%		12,596.4		100.0%		

### Cost of sales

Our cost of sales mainly consists of purchase of raw materials, electricity, depreciation and amortization, and labor costs. The following table sets forth a breakdown of our cost of sales for the periods indicated:

		Year ended December 31,								
	20	09	20	10	2011					
	RMB'000	Percentage of total cost of sales	RMB'000	Percentage of total cost of sales	RMB'000	Percentage of total cost of sales				
Electricity	3,870,932	49.8%	3,482,995	37.1%	5,674,539	36.7%				
Purchase of alumina	2,382,343	30.7%	3,421,009	36.4%	5,689,584	36.8%				
Purchase of other raw materials	861,840	11.1%	1,865,559	19.9%	2,848,657	18.5%				
Depreciation	313,159	4.0%	446,669	4.8%	640,190	4.1%				
Labor	135,057	1.7%	257,542	2.7%	411,319	2.7%				
Repairs and packaging	27,368	0.4%	57,705	0.6%	85,768	0.6%				
Change in inventories	195,628	2.5%	(573,739)	(6.1%)	(786,547)	(5.1%)				
Others <sup>(1)</sup>	(17,229)	(0.2%)	431,982	4.6%	886,135	5.7%				
Total	7,769,098	100%	9,389,722	100.0%	15,449,645	100.0%				

		Six months ended June 30,						
	20	11	20	12				
	RMB'000	Percentage of total cost of sales	RMB'000	Percentage of total cost of sales				
Electricity	2,717,190	37.3%	3,102,383	36.4%				
Purchase of alumina	2,662,352	36.5%	3,045,895	35.7%				
Purchase of other raw materials	1,459,730	20.0%	1,244,182	14.6%				
Depreciation	300,239	4.1%	421,130	5.0%				
Labor	185,246	2.6%	278,785	3.3%				
Repairs and packaging	38,747	0.5%	54,811	0.6%				
Change in inventories	(364,682)	(5.0%)	(394,507)	(4.6%)				
Other	287,408	4.0%	768,876	9.0%				
Total	7,286,230	100.0%	8,521,555	100.0%				

(1) Represents the adjustments made for our inventories, raw materials used for resale and steam.

We use various raw materials in our aluminum production process, including, primarily, alumina, but also carbon anodes, fluorides and various other metals and materials. Purchase of raw materials accounted for approximately 41.8%, 56.3%, 55.3% and 50.3% of cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Purchase of raw materials as a percentage of cost of sales was higher for 2010 and 2011 as compared to 2009 and the six months ended June 30, 2012, primarily due to increases in the prices of alumina and carbon anodes.

Electricity cost is another major component of our cost of sales, accounting for approximately 49.8%, 37.1%, 36.7% and 36.4% of our cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Electricity cost comprises the cost of electricity we purchased from external suppliers and the cost of electricity generated by our own thermal power stations, which includes the cost of coal acquired for such purpose.

Depreciation of property, plant and equipment accounted for approximately 4.0%, 4.8%, 4.1% and 5.0% of our cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

Labor costs include salary, benefits and other expenses relating to staff directly involved in our production process. As our production process is highly mechanized, labor costs only account for a small percentage of our cost of sales.

Change in inventories represents the difference between the inventory balances as of the beginning and end of each period.

The following table sets forth our average alumina and average electricity costs incurred in the periods indicated by a ton of aluminum products that we sold during those periods:

	Year ended December 31,			Six month June		
	2009	2010	2011	2011	2012	
	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	
Alumina <sup>(1)</sup>	3,259	3,213	3,588	3,491	3,401	
Electricity <sup>(2)</sup>	5,295	3,271	3,578	3,563	3,464	

Notes:

Our average purchase cost of alumina for a ton of aluminum products sold decreased for the six months ended June 30, 2012 as compared with the six months ended June 30, 2011 primarily due to the cost saving from production of alumina in-house.

Our average purchase cost of alumina for a ton of aluminum products sold increased in 2011 as compared with 2010 primarily due to an increase in the price for alumina we purchased from Gaoxin, which was triggered by an increase in the average selling price of alumina to other independent third parties by Gaoxin in the second half of 2010 pursuant to the price adjustment mechanism in our alumina purchase agreement with Gaoxin and the relatively higher price we paid for the alumina we purchased from our new alumina supplier in Qingdao.

Our purchase cost of alumina for a ton of aluminum products sold decreased in 2010 as compared with 2009 primarily as a result of higher raw material prices in 2009. Our raw material prices were higher in 2009 due to the use of certain bauxite which was purchased in 2008 at a relatively high price. Bauxite is the major raw material for the production of alumina.

Our unit cost of electricity for a ton of aluminum products sold decreased for the six months ended June 30, 2012 as compared with the six months ended June 30, 2011 primarily due to an increase in the proportion of the electricity we used being generated by our thermal power stations (as opposed to being purchased from an external supplier), the unit cost of which was lower than the unit cost of electricity purchased from Gaoxin.

Our unit cost of electricity for a ton of aluminum products sold increased in 2011 as compared with 2010 primarily due to an increase in the proportion of electricity we purchased from external suppliers, which generally costs more than the electricity we generate with our own power stations, and an increase in the price of coal.

Our unit cost of electricity for a ton of our aluminum products sold decreased in 2010 as compared with 2009 primarily as a result of (i) a decrease in the price of electricity purchased from Gaoxin as the purchase price for 2009 also included the amortized construction cost for the power grid connecting our facilities to Gaoxin's generators, which was fully amortized by the end of 2009; (ii) a decrease in the unit cost of the electricity generated by our thermal power stations primarily attributable to an increase in its utilization rate; and (iii) an increase in the proportion of the electricity we used being generated by our thermal power stations (as opposed to being purchased from an external supplier), the unit cost of which was significantly lower than the unit cost of electricity purchased from Gaoxin.

<sup>(1)</sup> The unit cost of alumina equals to the total purchase cost of alumina for the period indicated divided by the total volume of aluminum products sold by us for such period.

<sup>(2)</sup> The unit cost of electricity equals to the total purchase cost of electricity from external supplier and the cost of electricity generated internally by our thermal power stations, which are allocated to the cost of our aluminum products sold, for the period indicated divided by the total volume of aluminum products sold by us for such period.

The following table sets forth the unit cost of sales of our aluminum products for the periods indicated:

	For the year ended December 31,			For the six months ended June 30,		
	2009	2010	2011	2011	2012	
	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	
Unit cost of sales of our aluminum						
products (per ton)	10,627	8,393	9,409	9,219	9,227	

Our unit cost of sales of aluminum products was RMB9,227 (US\$1,452.4) per ton for the six months ended June 30, 2012, remaining relatively stable compared to RMB9,219 per ton for the six months ended June 30, 2011. Our unit cost of sales of aluminum products increased to RMB9,409 per ton for 2011 from RMB8,393 per ton for 2010, primarily due to an increase in the average purchase price of alumina and an increase in the proportion of the electricity we purchased from external suppliers, the cost of which is generally higher than that of the electricity generated by our own thermal power stations. Our unit cost of sales of aluminum products decreased to RMB8,393 per ton for 2010 from RMB10,627 per ton for 2009, primarily due to a decrease in the price of the electricity we purchased from Gaoxin in 2010 because the price of the electricity we purchased in 2010 did not include the amortization of the construction costs of the power grid that we constructed with Gaoxin while the price of the electricity that we purchased in 2009 did.

## Other income and gain and loss

Other income and gain and loss primarily consist of net gain on sales of scrap materials, including primarily carbon anode slag, net gain on sales of materials, including primarily excess coal, foreign exchange gains, interest income and others, including forfeited deposits and penalties for contractual breach from suppliers.

#### Distribution and selling expenses

Distribution and selling expenses consist primarily of transportation costs. Distribution and selling expenses also include salaries and benefits for our sales and marketing personnel.

#### Administrative expenses

Administrative expenses consist primarily of administrative and management staff salaries and benefits, rental expenses, office expenses, stamp duty and business taxes, and other expenses.

#### Finance costs

Our finance costs consist of interest expenses on bank borrowings and discount interest paid in discounting bills we receive from our customers as payments for our products.

#### Other expenses

Other expenses mainly include expenses for professional services incurred in relation to our IPO in March 2011.

#### Income tax

Our effective tax rate for our continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012 was approximately 25.4%, 25.0%, 26.1% (including the 5% withholding tax on the proposed dividend distribution for 2011 that will be distributed in 2012) and 26.4%, respectively.

We were not subject to Cayman Islands profits tax as we had no assessable income arising in or derived from the Cayman Islands during the three years ended December 31, 2011 and the six months ended June 30, 2012. We were not subject to Hong Kong profits tax as we had no assessable income arising in or derived from Hong Kong during the three years ended December 31, 2011 and the six months ended June 30, 2012.

### **Discontinued** operations

### Profit for the year from discontinued operations

In addition to aluminum production, we were engaged in the dyeing business, the caustic soda manufacturing business and the alumina agency business, which were discontinued as of January 4, 2010, January 1, 2010 and December 31, 2009, respectively. Our dyeing business ceased production in January 2008 while our caustic soda manufacturing business was operational only in 2009. See "Business – Discontinued Operations."

Information relating to these discontinued operations is presented separately in our consolidated statements of comprehensive income, on separate line item after profit from continuing operations, before our profit and total comprehensive income. Profit (loss) from discontinued operations represents profit (loss) from these three discontinued businesses. Profit from our discontinued operations was approximately RMB31.5 million, nil and nil for 2010 and 2011 and the six months ended June 30, 2012, respectively, while loss from our discontinued operations was RMB9.4 million for 2009.

### **Consolidated Results of Operations**

The following table sets forth, for the periods indicated, information relating to certain income and expense items from our consolidated statements of comprehensive income:

	Year	r ended December 31,		Six months ended June 30,					
	2009	2010	2011	2011	2012	2012			
	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)			
	(in thousands)								
Revenue	8,668,428	15,131,591	23,626,031	11,335,320	12,596,372	1,982,744			
Cost of sales	(7,769,098)	(9,389,722)	(15,449,645)	(7,286,230)	(8,521,555)	(1,341,344)			
Gross profit	899,330	5,741,869	8,176,386	4,049,090	4,074,817	641,400			
Other income and gain and loss	97,216	210,535	311,960	138,988	186,284	29,322			
Distribution and selling expenses	(40,961)	(19,977)	(44,054)	(16,018)	(28,909)	(4,550)			
Administrative expenses	(92,335)	(112,038)	(167,033)	(82,897)	(131,264)	(20,662)			
Finance costs	(89,243)	(192,990)	(300,819)	(133,364)	(259,684)	(40,876)			
Changes in fair value of compound									
derivative	-	_	-	-	29,799	4,691			
Other expenses		(42,815)	(22,569)	(15,842)	(11,225)	(1,767)			
Profit before taxation	774,007	5,584,584	7,953,871	3,939,957	3,859,818	607,558			
Income tax expense	(196,924)	(1,395,868)	(2,078,461)	(1,033,896)	(1,019,400)	(160,460)			
Profit for the year/period from									
continuing operations	577,083	4,188,716	5,875,410	2,906,061	2,840,418	447,098			
Profit (loss) for the year/period from									
discontinued operations <sup>(1)</sup>	(9,441)	31,515	-	-	-	-			
Profit for the year/period	567,642	4,220,231	5,875,410	2,906,061	2,840,418	447,098			
Profit and total comprehensive income attributable to									
Owners of the Company	556,289	4,195,738	5,875,410	2,906,061	2,840,418	447,098			
Non-controlling interests	11,353	24,493	-	-	-	-			
	567,642	4,220,231	5,875,410	2,906,061	2,840,418	447,098			

# Consolidated Statements of Comprehensive Income

	Yea	r ended December 31,		Six months ended June 30,						
	2009	2010	2011	2011	2012	2012				
	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)				
	(in thousands)									
Earnings per share, in RMB,										
From continuing and discontinued operations										
Basic	0.11	0.84	1.03	0.53	0.48	0.10				
From continuing operations	0.11	0.92	1.02	0.52	0.48	0.10				
Basic	0.11	0.83	1.03	0.53	0.48	0.10				
From discontinued operations										
Basic		0.01								
Other financial data (unaudited):										
EBITDA <sup>(2)</sup>	1,247,130	6,370,016	9,091,881	4,453,971	4,712,709	741,808				
EBITDA margin <sup>(3)</sup>	14.4%	42.1%	38.5%	39.3%	37.4%	37.4%				

(1) The discontinued operations refer to (i) the disposal of dyeing business by Shandong Hongqiao with effect from January 4, 2010; (ii) the disposal of the caustic soda manufacturing business as a result of the disposal of Marine Chemical by Shandong Hongqiao with effect from January 1, 2010; and (iii) the cessation of the alumina agency business by Aluminum & Power with effect from December 31, 2009.

- (2) EBITDA refers to our profit from continuing operations before interest income/expense, amortization of prepaid lease payments, income tax expense and depreciation. EBITDA is not a standard measure under IFRS. EBITDA is a widely used financial indicator of a company's ability to service and incur debt. EBITDA should not be considered in isolation or construed as an alternative to cash flows, net income or any other measure of financial performance or as an indicator of our operating performance, liquidity, profitability or cash flows generated by operating, investing or financing activities. In evaluating EBITDA, we believe that investors should consider, among other things, the components of EBITDA such as sales and operating expenses and the amount by which EBITDA exceeds capital expenditures and other charges. We have included EBITDA because we believe it is a useful supplement to cash flow data as a measure of our performance and our ability to similarly titled measures presented by other companies. Investors should not compare our EBITDA to EBITDA presented by other companies use the same definition. See the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations Non-GAAP Financial Measures" for a reconciliation of our profit for the year or period under IFRS to our definition of EBITDA.
- (3) EBITDA margin is calculated by dividing EBITDA by revenue.

	Year e	nded December 3	31,	Six months ended June 30,		
	2009	2010	2011	2011	2012	
	%	%	%	%	%	
Continuing Operations						
Revenue	100.0	100.0	100.0	100.0	100.0	
Cost of sales	(89.6)	(62.1)	(65.4)	(64.3)	(67.7)	
Gross profit	10.4	37.9	34.6	35.7	32.3	
Other income and gain and loss	1.1	1.4	1.3	1.2	1.5	
Distribution and selling expenses	(0.5)	(0.1)	(0.2)	(0.1)	(0.2)	
Administrative expenses	(1.1)	(0.7)	(0.7)	(0.7)	(1.0	
Finance costs	(1.0)	(1.3)	(1.2)	(1.2)	(2.1	
Changes in fair value of compound						
derivative	_	_	_	_	0.2	
Other expenses	_	(0.3)	(0.1)	(0.2)	(0.1	
Profit before taxation	8.9	36.9	33.7	34.7	30.6	
Income tax (expense)	(2.3)	(9.2)	(8.8)	(9.1)	(8.1	
Profit for the year/period from						
continuing operations	6.6	27.7	24.9	25.6	22.5	

The following table sets forth certain items of our results of continuing operations as a percentage of revenue for the periods indicated:

#### Six months ended June 30, 2012 compared to six months ended June 30, 2011

### Revenue

Our revenue increased by approximately 11.1% to approximately RMB12,596.4 million (US\$1,982.7 million) for the six months ended June 30, 2012 from approximately RMB11,335.3 million for the six months ended June 30, 2011, primarily due to an increase in the sales volume of our aluminum products partially offset by a decrease in the average selling price of our aluminum products. Our sales volume of aluminum products increased by approximately 17.4% to approximately 895,565 tons for the six months ended June 30, 2012 from approximately 762,718 tons for the six months ended June 30, 2011, which was in line with the steady increase of our customer demand and our increased production capacity and output. The average selling price of our aluminum products decreased by approximately 5.0% to approximately RMB13,680 (US\$2,153.3) (excluding VAT) per ton for the first half of 2012 from approximately RMB14,405 (excluding VAT) per ton for the first half of 2011.

#### Cost of sales

Our cost of sales increased by approximately 17.0% to approximately RMB8,521.6 million (US\$1,341.4 million) for the six months ended June 30, 2012 from approximately RMB7,286.2 million for the six months ended June 30, 2011, primarily due to an increase in the sales volume of our aluminum products.

#### Gross profit and gross profit margin

As a result of the foregoing, our gross profit increased by approximately 0.6% to approximately RMB4,074.8 million (US\$641.4 million) for the six months ended June 30, 2012 from approximately RMB4,049.1 million for the six months ended June 30, 2011. Our overall gross profit margin decreased by 3.4 basis point to approximately 32.3% for the six months ended June 30, 2012 from 35.7% for the six months ended June 30, 2012 as compared to that of the corresponding period of the previous year while the unit production cost of aluminum products remained stable.

#### Other income and gain and loss

Our other income and gain and loss increased by approximately 34.0% to approximately RMB186.3 million (US\$29.3 million) for the six months ended June 30, 2012 from approximately RMB139.0 million for the six months ended June 30, 2011, primarily due to (i) an increase in revenue from sales of slag of carbon anode blocks due to an increase in the amount of slag of carbon anode blocks that we generated as a result of our increased production of aluminum products, and (ii) foreign exchange loss reduction.

#### Distribution and selling expenses

Our distribution and selling expenses increased by approximately 80.5% to approximately RMB28.9 million (US\$4.5 million) for the six months ended June 30, 2012 from approximately RMB16.0 million for the six months ended June 30, 2011. The increase in our distribution expenses was mainly attributable to an increase in our transportation cost to approximately RMB21.8 million (US\$3.4 million) for the first half of 2012 from approximately RMB15.7 million for the first half of 2011 as a result of an increase in the sales volume of our aluminum products, an increase in transportation unit cost, and a larger proportion of aluminum alloy ingots that we sold as compared to molten aluminum alloy which had a shorter delivery distance and hence the transportation cost of which was lower.

#### Administrative expenses

Our administrative expenses increased by approximately 58.3% to approximately RMB131.3 million (US\$20.7 million) for the six months ended June 30, 2012 as compared to approximately RMB82.9 million for the corresponding period of the previous year, mainly due to the increase in administrative staff headcount and their remuneration as a result of our production capacity expansion and the increase in local tax payables and amortization of prepaid lease payments arising from our purchase of land for the construction of new plants for the expansion of our production capacity.

### Financial costs

Our financial costs increased by approximately 94.7% to approximately RMB259.7 million (US\$40.9 million) for the six months ended June 30, 2012 as compared to approximately RMB133.4 million for the corresponding period of the previous year, primarily due to increased interest expenses because of our increased total bank borrowings in the first half of 2012 as compared to the corresponding period of the previous year.

### Other expenses

Our other expenses were approximately RMB11.2 million (US\$1.8 million) for the six months ended June 30, 2012 mainly for payment of fees for external professional service. Our other expenses were approximately RMB15.8 million for the six months ended June 30, 2011, mainly for expenses related to our IPO.

#### Income tax expense

Our income tax for the first half of 2012 amounted to approximately RMB1,019.4 million (US\$160.5 million), representing a decrease of approximately 1.4% as compared to approximately RMB1,033.9 million for the corresponding period of the previous year, which was mainly attributable to the decrease of our profit before taxation for the first half of 2012.

## Profit and total comprehensive income for the period

As a result of the foregoing, our profit and total comprehensive income for the period decreased by approximately 2.3% to approximately RMB2,840.4 million (US\$447.1 million) for the six months ended June 30, 2012 from approximately RMB2,906.1 million for the six months ended June 30, 2011.

## Year ended December 31, 2011 compared to year ended December 31, 2010

#### Revenue

Our revenue increased by approximately 56.1% to approximately RMB23,626.0 million for 2011 from approximately RMB15,131.6 million for 2010, primarily due to an increase in both our sales volume and the average selling price of our aluminum products. Our sales volume of aluminum products increased by approximately 48.9% to approximately 1,585,810 tons for 2011 from approximately 1,064,775 tons for 2010, primarily reflecting our increased production capacity and output and an increase in market demand for our products as the PRC economy recovered. The average selling price of our aluminum products increased by approximately 6.5% to approximately RMB14,458 per ton for 2011 from approximately RMB13,575 per ton for 2010, which was in line with the general increase in market prices of aluminum products over that time as the PRC economy recovered and market demand for aluminum products increased. In addition, our revenue generated from selling steam to Gaoxin increased by 2.9% to approximately RMB697.6 million for 2011 from approximately RMB677.7 million for 2010, which also contributed to the overall increase in our revenue.

### Cost of sales

Our cost of sales increased by approximately 64.5% to approximately RMB15,449.6 million for 2011 from approximately RMB9,389.7 million for 2010, primarily due to an increase in the sales volume of our aluminum products and increases in the per unit cost of alumina and electricity. Our cost of sales increased by a larger percentage than the increase in our sales volume of aluminum products primarily due to increases in our electricity cost per ton of aluminum products sold, average purchase price of alumina, and unit cost of carbon anodes. Our average electricity cost per ton of aluminum products sold increased by 9.4% to approximately RMB3,578 for 2011 from approximately RMB3,271 for 2010 due to (i) an increase in the proportion of the electricity we purchased from Gaoxin as compared to that we produced internally and (ii) an increase in the unit cost of the electricity generated by our thermal power stations in 2011 as compared to 2010, which was primarily attributable to an increase in the price of coal. Our average purchase price of alumina increase to RMB1,870 per ton for 2011 as compared to RMB1,621 per ton for 2010 due to a price adjustment mechanism in our alumina purchase agreement with Gaoxin, triggered by an increase in the average selling price of alumina to other independent third parties from Gaoxin in the second half of 2010 and the relatively higher price we paid for the alumina we purchased from our new alumina supplier in Qingdao.

## Gross profit and gross profit margin

As a result of the foregoing, our gross profit increased by approximately 42.4% to approximately RMB8,176.4 million for 2011 as compared to approximately RMB5,741.9 million for 2010. Our gross profit margin decreased slightly to approximately 34.6% for 2011 from approximately 37.9% for 2010.

### Other income and gain and loss

Our other income and gain and loss increased by approximately 48.2% to approximately RMB312.0 million for 2011 from approximately RMB210.5 million for 2010, primarily due to (i) an increase in our income from sales of slag of carbon anode blocks due to an increase in the amount of slag of carbon anode blocks that we generated as a result of our increased production of aluminum products; and (ii) an increase in income from the sale of raw materials.

## Distribution and selling expenses

Our distribution and selling expenses increased by approximately 120.5% to approximately RMB44.1 million for 2011 from approximately RMB20.0 million for 2010. The increase in our distribution and selling expenses was mainly attributable to an increase in our transportation cost to approximately RMB38.9 million for 2011 from approximately RMB19.7 million for 2010. Our transportation cost increased primarily due to the increase in the sales volume of our aluminum products and the increase in our transportation unit cost as a result of the increase in refined oil prices and a larger proportion of aluminum alloy ingots that we sold as compared to molten aluminum alloy which had a shorter delivery distance and hence the transportation cost of which was lower. Our average transportation cost of aluminum products sold was approximately RMB19 per ton and RMB25 per ton for 2010 and 2011, respectively.

#### Administrative expenses

Our administrative expenses increased by approximately 49.1% to approximately RMB167.0 million for 2011 from approximately RMB112.0 million for 2010, mainly due to an increase in staff remuneration, an increase in local tax payables and amortization of prepaid lease payment arising from our purchase of land for the expansion of our production capacity.

## Finance costs

Our finance costs increased by approximately 55.9% to approximately RMB300.8 million for 2011 from approximately RMB193.0 million for 2010. Finance costs were higher for 2011 due primarily to the new bank borrowings we raised in 2011 and an increase in the applicable interest rates in 2011.

### Other expenses

Our other expenses decreased by approximately 47.3% to approximately RMB22.6 million for 2011 from approximately RMB42.8 million for 2010 because our IPO concluded in early 2011 and the majority of our IPO related expenses were incurred in 2010.

### Income tax expense

Our income tax expense increased by approximately 48.9% to approximately RMB2,078.5 million for 2011 from approximately RMB1,395.9 million for 2010 mainly due to our increased profit before taxation. The effective income tax rates applicable to us for 2010 and 2011 were 25.0% and 26.1%, respectively.

### Profit for the year from continuing operations

As a result of the foregoing, our profit for the period from continuing operations increased by approximately 40.3% to approximately RMB5,875.4 million for 2011 from approximately RMB4,188.7 million for 2010.

### Profit for the period from discontinued operations

Profit from discontinued operations was nil for 2011 as compared to approximately RMB31.5 million for 2010 because we completed the disposal of our discontinued operations, namely, the dyeing business, the caustic soda manufacturing business and the alumina agency business, in the first quarter of 2010.

### Year ended December 31, 2010 compared to year ended December 31, 2009

#### Revenue

Our revenue increased by approximately 74.6% to approximately RMB15,131.6 million for 2010 from approximately RMB8,668.4 million for 2009, primarily due to an increase in both our sales volume and average selling price of our aluminum products. Our sales volume of aluminum products increased by approximately 45.7% to approximately 1,064,775 tons for 2010 from approximately 731,043 tons for 2009 primarily reflecting our increased production capacity and output and an increase in market demand as the PRC economy recovered. The average selling price of our aluminum products increased by approximately 14.5% to approximately RMB13,575 per ton for 2010 from approximately RMB11,858 per ton for 2009 in line with the general increase in market prices of aluminum products as a result of an increase in demand for aluminum products as the PRC economy recovered. In addition, we started selling steam to Gaoxin and generated revenue of approximately RMB677.7 million for 2010, which also contributed to the increase in our revenue. We determined our selling price of aluminum products based on the spot market price, which was mainly driven by the demand for and supply of the aluminum products in the PRC. For 2010, the spot market price for aluminum products increased due to the increase in demand for aluminum products as a result of the recovery of the PRC economy, which was also in line with the price trend of the spot market price for aluminum products increased due to the increase in demand for aluminum products as a result of the recovery of the PRC economy, which was also in line with the price trend of the spot market price for aluminum products increased due to the increase in demand for aluminum products as a result of the recovery of the PRC economy, which was also in line with the price trend of the spot market price for aluminum the same period.

## Cost of sales

Our cost of sales increased by approximately 20.9% to approximately RMB9,389.7 million for 2010 from approximately RMB7,769.1 million for 2009, primarily due to an increase in the sales volume of our aluminum products, which was partially offset by the decrease in the prices of alumina and electricity. Our cost of sales increased by a smaller percentage than the increase in our sales volume of aluminum products primarily due to decreases in our electricity cost per kWh and the average purchase price of alumina, which were partially offset by an increase in the unit cost of carbon anodes. Our average electricity cost per ton of aluminum products sold decreased by 38.2% to approximately RMB3,271 for 2010 from approximately RMB5,295 for 2009 due to (i) a decrease in the price of electricity purchased from Gaoxin as the purchase price for 2009 also included the amortized construction cost for the power grid connecting our facilities to Gaoxin's generators, which was fully amortized by the end of 2009; (ii) a decrease in its utilization rate; and (iii) an increase in the proportion of the electricity we used being generated by our thermal power stations (as opposed to being purchased from an external supplier), the unit cost of which was significantly lower than the unit cost of electricity purchased from Gaoxin. Our average purchase price of alumina decreased to RMB1,621 per ton for 2010 as compared to RMB1,712 per ton for 2009.

### Gross profit and gross profit margin

As a result of the foregoing, our gross profit increased significantly to approximately RMB5,741.9 million for 2010 as compared to a gross profit of approximately RMB899.3 million for 2009. Our gross profit margin increased to approximately 37.9% for 2010 from approximately 10.4% for 2009.

#### Other income and gain and loss

Our other income and gain and loss increased by approximately 116.6% to approximately RMB210.5 million for 2010 from approximately RMB97.2 million for 2009, primarily due to (i) an increase in our income from sales of slag of carbon anode blocks due to an increase in the amount of slag of carbon anode blocks that we generated as a result of our increased production output of aluminum products; and (ii) an increase in income from others, which includes mainly penalties paid by our suppliers and construction contractors for quality defects in raw materials and construction and penalties paid by our employees who violated our internal policies and requirements, and from the disposal of coal ash and coal cinder from our thermal power stations.

### Distribution and selling expenses

Our distribution and selling expenses decreased by approximately 51.2% to approximately RMB20.0 million for 2010 from approximately RMB41.0 million for 2009. The decrease in our distribution and selling expenses was mainly attributable to a decrease in our transportation cost to approximately RMB19.7 million for 2010 from approximately RMB40.2 million for 2009 as we sold a smaller proportion of aluminum alloy ingots as compared to molten aluminum alloy which had a shorter delivery distance and hence the transportation cost of which was lower. Our average transportation cost of aluminum products sold was approximately RMB55 per ton and RMB19 per ton for 2009 and 2010, respectively.

### Administrative expenses

Our administrative expenses increased by approximately 21.3% to approximately RMB112.0 million for 2010 from approximately RMB92.3 million for 2009, mainly due to an increase in our local tax payables arising from our purchase of land and our construction of new plants as part of the expansion of our manufacturing facilities in 2010.

#### Finance costs

Our finance costs increased by approximately 116.3% to approximately RMB193.0 million for 2010 from approximately RMB89.2 million for 2009. Finance costs were higher for 2010 due primarily to the new bank borrowings we raised in 2010 and an increase in the interest rates we paid.

#### Other expenses

We incurred other expenses of approximately RMB42.8 million for 2010 for professional services in connection with our IPO. We did not incur other expenses in 2009.

#### Income tax expense

Our income tax expense increased significantly to approximately RMB1,395.9 million for 2010 from approximately RMB196.9 million for 2009 due mainly to our increased profit before taxation. The effective income tax rates applicable to us for 2009 and 2010 were 25.4% and 25.0%, respectively.

## Profit for the year from continuing operations

As a result of the foregoing, our profit for the period from continuing operations increased significantly to approximately RMB4,188.7 million for 2010 from approximately RMB577.1 million for 2009.

## Profit for the period from discontinued operations

Profit from discontinued operations amounted to approximately RMB31.5 million for 2010, as compared to a loss of approximately RMB9.4 million for 2009, due primarily to the following reasons:

(i) *Dyeing business*. We had a gain of approximately RMB24.9 million from the disposal of our dyeing business for 2010, as compared to a loss of approximately RMB0.9 million for 2009.

- (ii) Caustic soda manufacturing business. We had a gain of approximately RMB6.6 million from the disposal of the caustic soda manufacturing business for 2010, as compared to a loss of RMB6.6 million for 2009 as our caustic soda manufacturing business became operational in May 2009 and we incurred significant start-up costs in that year as a result.
- (iii) *Alumina agency business*. We had losses amounting to approximately RMB1.9 million for 2009. We discontinued the alumina agency business in the end of 2009.

# Inventories, Trade Receivables and Trade Payables

# Inventories

The following table sets forth a summary of our inventory balances as of the dates indicated:

	Α	As of June 30,		
	2009	2010	2011	2012
	(RMB)	(RMB)	(RMB)	(RMB)
		(in thou	sands)	
Raw materials	142,290	376,455	787,886	922,499
Work in process	396,032	744,762	1,108,729	1,360,371
Finished goods	10,038	883	12,031	26,709
	548,360	1,122,100	1,908,646	2,309,579

Our inventories increased by approximately 21.0% to approximately RMB2,309.6 million (US\$363.5 million) as of June 30, 2012 from approximately RMB1,908.6 million as of December 31, 2011, primarily due to the expansion of our production scale.

Our inventories increased by approximately 70.1% to approximately RMB1,908.6 million as of December 31, 2011 from approximately RMB1,122.1 million as of December 31, 2010 primarily due to increases in work in process and raw materials as a result of our increased production capacity and output.

Our inventories increased by approximately 104.6% to approximately RMB1,122.1 million as of December 31, 2010 from approximately RMB548.4 million as of December 31, 2009 primarily due to increases in work in process and raw materials as a result of our increased production capacity and output.

The following tables set forth the ageing analysis of our inventories as of the dates indicated:

	As of December 31, 2009									
	0-30 days	31-60 days	61-90 days	91-180 days	181-365 days	More than 1 year	Total			
	(RMB in thousands)									
Raw materials	134,911	201	3	6	4,163	3,006	142,290			
Work in process	396,032	_	_	_	_	_	396,032			
Finished goods	8,227	_	_		_	1,811	10,038			
Total	539,170	201	3	6	4,163	4,817	548,360			

		As of December 31, 2010							
	0-30 days	31-60 days	61-90 days	91-180 days	181-365 days	More than 1 year	Total		
	(RMB in thousands)								
Raw materials	342,912	14,351	506	6,143	2,283	10,260	376,455		
Work in process	744,423	339	_	_	-	_	744,762		
Finished goods	883						883		
Total	1,088,218	14,690	506	6,143	2,283	10,260	1,122,100		

		As of December 31, 2011								
	0-30 days	31-60 days	61-90 days	91-180 days	181-365 days	More than 1 year	Total			
	(RMB in thousands)									
Raw materials	605,636	164,548	2,044	3,028	3,391	9,239	787,886			
Work in process	1,104,210	1,064	3,455	_	_	_	1,108,729			
Finished goods	11,411	_	398	222	_	_	12,031			
Total	1,721,257	165,612	5,897	3,250	3,391	9,239	1,908,646			

		As of June 30, 2012								
	0-30 days	31-60 days	61-90 days	91-180 days	181-365 days	More than 1 year	Total			
		(RMB in thousands)								
Raw materials	727,909	170,110	5,273	8,164	4,218	6,825	922,499			
Work in process	1,298,566	61,105	221	479	_	_	1,360,371			
Finished goods	26,709						26,709			
Total	2,053,184	231,215	5,494	8,643	4,218	6,825	2,309,579			

Our long unused inventories comprise primarily magnesium fluoride, calcium fluoride, cryolite, scorched particles and aluminum fluoride, as these materials are primarily used when aluminum smelting furnaces are started up or during an overhaul of a production line.

## Trade receivables

We require our customers to make prepayment in full before delivery. In the event that the total price of goods actually delivered exceeds a customer's prepayment, we generally allow a credit period of up to 90 days. See "Business – Sales and Marketing – Sales contract terms." As a result of this policy, we did not have a significant amount of account receivables during the three years ended December 31, 2011 and the six months ended June 30, 2012.

The following table sets forth an ageing analysis (based on dates of invoices) of our trade receivables (net of allowance for doubtful debts) as of the dates indicated (our trade receivables include the trade receivables recorded in assets held for sale and assets attributable to the alumina production business of Chuangye Group, while the analysis below does not include such information):

		As of December 31,						As of June 30,	
	200	2009		2010		2011		2012	
	RMB'000	%	RMB'000	%	RMB'000	%	RMB'000	%	
0-90 days	180,078	99.5	3,716	100.0	1,438	100.0	12,091	100.0	
91-180 days	920	0.5	-	-	-	-	-	-	
1-2 years									
Total	180,998	100.0	3,716	100.0	1,438	100.0	12,091	100.0	

We did not have trade receivables as of June 30, 2012 that were past due.

## Trade payables

Our trade payables decreased by 20.4% to approximately RMB967.8 million (US\$152.3 million) as of June 30, 2012 from approximately RMB1,216.3 million as of December 31, 2011, primarily due to the decrease of bills receivable endorsed with recourse for third parties.

Our trade payables increased by approximately 78.2% to approximately RMB1,216.3 million as of December 31, 2011 from approximately RMB682.4 million as of December 31, 2010, primarily due to our increased trade payables relating to the purchase of raw materials.

Our trade payables increased by approximately 73.1% to approximately RMB682.4 million as of December 31, 2010 from approximately RMB394.3 million as of December 31, 2009, primarily due to our increased use of endorsed bank bills with recourse to settle our purchase of raw materials.

The following table sets forth an ageing analysis of the trade payables of our continuing operations as of the dates indicated:

		As of December 31,						As of June 30,	
	2009		2010		2011		2012		
	RMB'000	%	RMB'000	%	RMB'000	%	RMB'000	%	
0-180 days	340,606	86.4	681,177	99.8	1,202,549	98.9	964,445	99.6	
180-365 days	11,782	3.0	499	0.08	12,597	1.03	1,965	0.2	
1-2 years	36,746	9.3	307	0.05	798	0.06	1,339	0.1	
More than 2 years	5,212	1.3	446	0.07	315	0.01	11	0.1	
Total	394,346	100.0	682,429	100.0	1,216,259	100.0	967,760	100.0	

Our trade payables that were due between one and two years as of December 31, 2009, were primarily attributable to our purchases of equipment used in the expansion of our thermal power stations in 2008, payment for which was not due until it was commissioned in 2010. Our trade payables that were due between one and two years decreased significantly as of December 31, 2010, primarily because we paid off some trade payables which were due. Our trade payables that were due between six months and 12 months as well as one and two years increased as of December 31, 2011, primarily due to the fact that certain payment related to the purchase of materials for production had not been settled as of December 31, 2011. Our trade payables that were due between six months and 12 months decreased significantly as of June 30, 2012, primarily because we paid off some trade payables which were due.

## Turnover days

The following table sets forth the turnover days of our trade receivables, inventories and trade payables, exclusive of those held for sale, for the periods indicated:

	Year e	nded December	Six months ended June 30,		
	2009	2010	2011	2011	2012
Turnover days of inventories <sup>(1)</sup>	30	32	36	33	45
Turnover days of trade					
receivables <sup>(2)</sup>	2	1	1	1	1
Turnover days of trade payables <sup>(3)</sup>	33	21	22	30	23

(1) Turnover days of inventories for a certain period is derived by dividing the arithmetic mean of the opening and closing balances of inventory by cost of sales for the relevant period and then multiplied by 365 days for a year.

(2) Turnover days of trade receivables for a certain period is derived by dividing the arithmetic mean of the opening and closing balances of trade receivables by revenue for the relevant period and then multiplied by 365 days for a year.

(3) Turnover days of trade payables for a certain period is derived by dividing the arithmetic mean of opening and closing balances of trade payables, by cost of sales for the relevant period and then multiplied by 365 days for a year.

Our turnover days of inventories for the first half of 2012 increased by 12 days to approximately 45 days from 33 days for the first half of 2011, primarily due to an increase in our inventory of production raw materials resulting from our production expansion and an increase in work-in-process as a result of our commission of a new aluminum product production line. Our turnover days of inventories in 2011 increased to 36 days from 32 days in 2010 primarily due to an increase in the amount of the inventories resulting from an increase in our production and an increase in our raw material reserves. Our turnover days of inventories in 2010 increased to 32 days from 30 days in 2009 primarily due to an increase in our inventory of raw materials resulting from our expanded operations which also resulted in an increase in work-in-process.

Our turnover days of trade receivables are generally low because we require prepayment before delivery. We only grant our customers a credit period of no more than 90 days if actual delivery exceeds their prepayment amounts.

Our turnover days of trade payables for the first half of 2012 decreased by 7 days to approximately 23 days from approximately 30 days for the first half of 2011, primarily due to the increase of our operating costs as a result of the increase in our sales volume of aluminum products and the lower amount of trade payables for the first half of 2012 as compared to that of the corresponding period of the previous year. Our turnover days of trade payables were 22 days as of December 31, 2011. Our turnover days of trade payables decreased to 21 days in 2010 from 33 days in 2009 due primarily to our having a significantly lower amount of trade payables as of December 31, 2010 as we settled certain trade payables related to the price of equipment for our production lines in 2009.

## Liquidity and Capital Resources

# Liquidity

We fund our operations primarily with funds raised in capital markets, cash flows from operations and short-term and long-term borrowings. Our primary uses of funds have been capital expenditures, working capital and repayment of short-term and long-term borrowings. Any significant decrease in demand for, or pricing of, our products or a significant decrease in the availability of bank loans may adversely impact our liquidity. See "Indebtedness" for a further discussion of our indebtedness.

The following table sets forth certain data regarding our current assets and current liabilities as of the dates indicated:

	1	As of December 31,		As of June	e 30,	
	2009	2010	2011	2012	2012	
	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)	
			(in thousands)			
CURRENT ASSETS						
Inventories	548,360	1,122,100	1,908,646	2,309,579	363,541	
Trade receivables	44,416	3,716	1,438	12,091	1,903	
Bills receivable	763,370	882,570	1,312,960	1,418,577	233,292	
Prepayments and other receivables	15,377	156,741	121,802	154,154	24,265	
Amounts due from related parties	153,756	_	-	_	-	
Prepaid lease payments – current portion	_	3,015	19,726	21,929	3,453	
Tax recoverable	97,790	_	_	_	_	
Restricted bank deposits	760,646	82,650	14,468	661,445	104,115	
Bank balances and cash	443,133	2,669,569	7,484,795	6,560,156	1,032,608	
	2,826,848	4,920,361	10,863,835	11,137,931	1,753,177	
Financial assets contracted for Alumina Production						
Business	1,029,762	_	_	_	_	
Assets classified as held for sale	1,613,854	_	_	_	-	
	5,470,464	4,920,361	10,863,835	11,137,931	1,753,177	
CURRENT LIABILITIES						
Trade payables	394,346	682,429	1,216,259	967,760	152,331	
Bills payable	310,000	_	-	200,000	31,481	
Other payables	848,059	1,168,902	2,644,583	3,360,818	529,013	
Amounts due to related parties	3,556,479	_	-	_	-	
Dividends payables	_	_	-	143	23	
Income tax payable	_	157,974	137,879	289,508	45,570	
Bank borrowings – due within one year	929,173	72,850	3,210,610	2,764,052	435,078	
	6,038,057	2,082,155	7,209,331	7,582,281	1,193,496	
Financial liabilities contracted for Alumina						
Production Business	1,105,843	_	_	_	_	
Liabilities associated with assets classified as held						
for sale	980,551	-	-	-	-	
	8,124,451	2,082,155	7,209,331	7,582,281	1,193,496	
NET CURRENT (LIABILITIES) ASSETS	(2,653,987)	2,838,206	3,654,504	3,555,650	559,680	

## Net current assets

As of June 30, 2012, our net current assets were approximately RMB3,555.7 million (US\$559.7 million), consisting of current assets of approximately RMB11,137.9 million and current liabilities of approximately RMB7,582.3 million. Our current assets mainly included bank balances and cash of approximately RMB 6,560.2 million, inventories of approximately RMB2,309.6 million and bills receivables of approximately RMB1,418.6 million. Our current liabilities mainly included borrowings due within one year of approximately RMB2,764.1 million and other payables of approximately RMB3,360.8 million.

As of December 31, 2011, our net current assets were approximately RMB3,654.5 million, consisting of current assets of approximately RMB10,863.8 million and current liabilities of approximately RMB7,209.3 million. Our current assets mainly included bank balances and cash of approximately RMB7,484.8 million, inventories of approximately RMB1,908.6 million and bills receivables of approximately RMB1,313.0 million. Our current liabilities mainly included trade payables of approximately RMB1,216.3 million, borrowings due within one year of approximately RMB3,210.6 million and other payables of approximately RMB2,644.6 million. The increase in our net current assets as of December 31, 2011 as compared to December 31, 2010, was primarily due to an increase in our cash assets as a result of our IPO and an increase in our inventories as a result of our increased production capacity and output.

We had net current assets of approximately RMB2,838.2 million as of December 31, 2010, primarily because (i) we paid back amounts due to related parties, (ii) we increased the amount of our long-term borrowings, and (iii) our profitability has been improved, which in turn led to the increase of our cash and cash equivalent.

We had net current liabilities of approximately RMB2,654.0 million as of December 31, 2009, primarily because we took advantage of financing from related parties and by means of making use of supplier credit periods as well as due to increases in our short-term bank borrowings which we used to expand our business.

# Cash flows

We generally finance our operations through a combination of shareholders' equity, internally generated cash flows and bank borrowings. As of June 30, 2012, we had cash and cash equivalents of RMB6,560.2 million (US\$1,032.6 million). The following table sets forth our cash flows for the periods indicated:

	Year ended December 31,			Six months ended June 30,				
	2009	2010	2011	2011	2012	2012		
	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)		
	(in thousands)							
Net cash generated from operating								
activities	1,923,575	4,767,346	5,630,079	3,307,218	3,524,041	554,705		
Net cash used in investing activities	(1,472,690)	(1,814,002)	(8,898,355)	(4,110,059)	(5,791,557)	(911,626)		
Net cash from (used in) financing								
activities	(39,889)	(812,720)	8,083,502	5,707,861	1,342,877	211,378		
Net (decrease)/increase in cash and								
cash equivalents	410,996	2,140,624	4,815,226	4,905,020	(924,639)	(145,543)		
Cash and cash equivalents at								
beginning of year/period	117,949	528,945	2,669,569	2,669,569	7,484,795	1,178,151		
Cash and cash equivalents at end of								
year/period	528,945	2,669,569	7,484,795	7,574,589	6,560,156	1,032,608		

# Net cash generated from operating activities

For the six months ended June 30, 2012, we generated net cash from our operating activities of approximately RMB3,524.0 million (US\$554.7 million), primarily reflecting net profit for the period of approximately RMB2,840.4 million (US\$447.1 million), as partially offset by an increase in inventories of approximately RMB400.9 million (US\$63.1 million) and a decrease of receivables, deposits and prepayments of approximately RMB148.6 million (US\$23.4 million).

In 2011, we generated net cash from our operating activities of approximately RMB5,630.1 million, primarily reflecting net profit for the period of approximately RMB5,875.4 million, as partially offset by an increase in inventories of approximately RMB786.5 million.

In 2010, we generated net cash from our operating activities of approximately RMB4,767.3 million, primarily reflecting net profit for the year of approximately RMB4,220.2 million and a decrease in receivables, deposits and prepayments, as partially offset by an increase in inventories of approximately RMB575.7 million and decrease in payables, deposits received and accrued charges of approximately RMB534.3 million.

In 2009, we generated net cash from operating activities of approximately RMB1,923.6 million, reflecting net profit for the year of approximately RMB567.6 million, a decrease in receivables, deposits and prepayments of approximately RMB1,113.6 million and a decrease in inventories of RMB128.2 million, as partially offset by a decrease in payables, deposits received and accrued charges of approximately RMB518.4 million.

## Net cash used in investing activities

The principal items affecting our net cash used in investing activities during the three years ended December 31, 2011 and the six months ended June 30, 2012 were our capital expenditures for purchase of property, plant and equipment.

Net cash used in investing activities was approximately RMB5,791.6 million (US\$911.6 million) for the six months ended June 30, 2012, reflecting primarily cash used for purchase of property, plant and equipment of approximately RMB5,050.6 million (US\$795.0 million), an increase in restricted bank deposits of approximately RMB647.0 million (US\$101.8 million) and an increase of prepaid lease payments of approximately RMB110.1 million (US\$17.3 million).

Net cash used in investing activities was approximately RMB8,898.4 million in 2011. That amount reflected primarily cash used for purchase of property, plant and equipment of approximately RMB8,169.4 million, and addition to prepaid lease payments of approximately RMB808.3 million.

Net cash used in investing activities was approximately RMB1,814.0 million for 2010. That amount reflected primarily cash used for purchase of property, plant and equipment of approximately RMB2,715.1 million, acquisition of Zhengtong of approximately RMB176.0 million, as partially offset by a decrease in restricted bank deposits of approximately RMB678.0 million and cash received from disposal of Marine Chemical of approximately RMB514.2 million.

Net cash used in investing activities was approximately RMB1,472.7 million in 2009. That amount reflected primarily cash used for purchase of property, plant and equipment of approximately RMB318.2 million, deposits for purchase of property, plant and equipment of approximately RMB532.0 million and an increase in restricted bank deposits for issuances of letters of credit and bank bills of RMB592.5 million.

# Net cash generated from (used in) financing activities

Our financing activities during the three years ended December 31, 2011 and the six months ended June 30, 2012 mainly included proceeds from and repayments of loans and borrowings as well as proceeds from our IPO.

Net cash generated from financing activities for the six months ended June 30, 2012 was approximately RMB1,342.9 million (US\$211.4 million), reflecting primarily new bank borrowings of approximately RMB6,226.1 million (US\$980.0 million), other borrowings of approximately RMB1,341.8 million (US\$211.2 million), proceeds from the issue of Convertible Bonds of approximately RMB945.5 million (US\$148.8 million), as partially offset by the repayments of borrowings of approximately RMB5,377.5 million (US\$846.5 million) and dividends paid of approximately RMB1,536.2 million (US\$241.8 million).

Net cash generated from financing activities in 2011 was approximately RMB8,083.5 million. That amount reflected primarily proceeds from issue of shares of approximately RMB5,365.0 million and new borrowings raised of approximately RMB4,614.9 million, partially offset by shares issue expenses paid of approximately RMB145.9 million.

Net cash used in financing activities in 2010 was approximately RMB812.7 million. That amount reflected primarily repayments to related parties of approximately RMB7,965.7 million and repayment of bank borrowings of approximately RMB1,394.1 million, as partially offset by advances from related parties of approximately RMB4,470.8 million and new bank borrowings of approximately RMB4,334.4 million.

Net cash used in financing activities in 2009 was approximately RMB39.9 million. That amount reflected primarily repayments to related parties of approximately RMB8,957.5 million, repayment of bank borrowings of approximately RMB1,084.4 million and interest paid of approximately RMB126.6 million, partially offset by advances from related parties of approximately RMB8,872.1 million and new bank borrowings of approximately RMB1,256.5 million.

## **Certain Balance Sheet Items**

### Intangible assets

Our intangible assets consisted of two components, (i) those charged for our continuing operations which were related to cost savings in our aluminum production due to our procurement of alumina at cost from Chuangye Group under the Agency Agreement (the value of the Agency Agreement was recognized as an intangible asset commencing on our obtaining control of Aluminum & Power) and (ii) those charged for our discontinued operations which were related to our Group's right to receive management fees under the Agency Agreement, and both components have been amortized on a straight-line basis over their estimated useful lives of 3.6 years.

The original amount of our intangible assets as of January 1, 2009 was RMB443.0 million, of which RMB319.4 million had been amortized as of December 31, 2008 and another RMB123.6 million had been amortized in 2009. The cost had been fully amortized as of December 31, 2009.

The intangible assets charged for our continuing operations were approximately RMB11.7 million, nil, nil and nil for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. The intangible assets charged for our discontinued operations were approximately RMB111.9 million, nil, nil and nil for the same periods.

### Bills receivable

Our bills receivable increased by approximately 8.0% to approximately RMB1,418.6 million (US\$223.3 million) as of June 30, 2012 from approximately RMB1,313.0 million as of December 31, 2011, primarily due to an increase in our sales of aluminum products for the six months ended June 30, 2012.

Our bills receivable increased by approximately 48.8% to approximately RMB1,313.0 million as of December 31, 2011 from approximately RMB882.6 million as of December 31, 2010, primarily due to an increase in our sales of aluminum products in 2011.

Our bills receivable increased by approximately 15.6% to approximately RMB882.6 million as of December 31, 2010 from approximately RMB763.4 million as of December 31, 2009, primarily due to an increase in our sales of aluminum products for 2010.

### Financial assets and liabilities contracted for alumina production business

Pursuant to the Agency Agreement between Chuangye Group and Aluminum & Power dated May 25, 2006, Aluminum & Power agreed to operate the alumina business owned by Chuangye Group on behalf of Chuangye Group for the period from May 26, 2006 to December 31, 2009. The Agency Agreement was terminated in December 2009. See "Business – Discontinued Operations – Alumina Agency Business."

The assets and liabilities of the alumina production business operated by us on behalf of Chuangye Group have not been recorded in our consolidated financial statements except for certain financial instruments contracted by us as an agent on behalf of Chuangye Group as a result of the alumina agency business, which are included in our consolidated financial statements. During the term of the Agency Agreement, including the year ended December 31, 2009, Aluminum & Power recorded on its books and records, as an agent, the transactions of the alumina production business other than those relating to property, plant and equipment which were purchased, recorded and maintained by Chuangye Group, in accordance with IAS 39(14).

Details of the financial instruments contracted for the alumina production business of Chuangye Group are as follows:

	As	As of June 30						
	2009	2010	2011	2012				
	(RMB)	(RMB)	(RMB)	(RMB)				
	(in thousands)							
Financial assets								
Trade receivables	128,549	_	_	-				
Bills receivable	678,259	_	_	-				
Other receivables	1,173	_	_	-				
Trade receivables due from related parties	221,781							
	1,029,762	_	_	-				

	As	As of June 30,						
	2009	2010	2011	2012				
	(RMB)	(RMB)	(RMB)	(RMB)				
	(in thousands)							
Financial liabilities								
Trade payables	312,439	_	_	-				
Bills payable	340,000	_	_	-				
Other payables	1,743	_	_	-				
Trade payables due to related parties	402,661	_	_	-				
Bank borrowings	49,000	_	-	-				
	1,105,843							

## Amounts due from/to related parties

As of December 31, 2009, 2010 and 2011 and June 30, 2012, we had amounts due from related parties totaling approximately RMB270.0 million (inclusive of assets held for sale), nil, nil and nil, respectively, and amounts due to related parties totaling approximately RMB3,646.8 million (inclusive of liabilities associated with assets held for sale), nil, nil and nil as of those dates, respectively.

Our amounts due from/to related parties represented primarily advances provided to or obtained from related parties. All amounts due from related parties were denominated in RMB, unsecured, interest free and repayable on demand. All amounts due to related parties were unsecured, non-interest bearing and payable on demand except for the amounts due to Chuangye Group of approximately RMB393.2 million as of December 31, 2009, which was attributable to our payments to Chuangye Group with endorsed bank bills with recourse and carried interest at prevailing market rates for discounted bills banking facilities in the PRC. Amounts due from/to related parties also represented balances granted to/by related parties involving trading activities and transactions. Our most significant trading activities and transactions with related parties in terms of transaction amount during the three years ended December 31, 2011 and the six months ended June 30, 2012 involved Chuangye Group and Aluminum Technology. Our transactions with Chuangye Group included primarily our acquisition of certain land use rights and aluminum production facilities from Chuangye Group and our operation of Chuangye Group's alumina business pursuant to the Agency Agreement. Our transactions with Aluminum Technology included primarily our purchases of carbon anodes from Aluminum Technology and our sales of carbon anode scrap.

## Prepayments and other receivables

Prepayments and other receivables primarily comprise prepayments to suppliers, value added tax receivables and other receivables. The following table sets forth a breakdown of our prepayments and other receivables for the periods indicated.

		As of December 31,		As of June 30,				
	2009	2010	2011	2012	2012			
	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)			
	(in thousands)							
Prepayment to suppliers	5,235	58,832	99,212 <sup>(1)</sup>	106,007	16,686			
Value added tax receivables	-	97,191	20,645	46,091	7,255			
Other receivables	10,142	718	1,945	2,056	324			
	15,377	156,741	121,802	154,154	24,265			

(1) The prepayment to Gaoxin in the amount of RMB495.1 million was offset by the trade payables to Gaoxin.

Our prepayments and other receivables increased to approximately RMB154.2 million (US\$24.3 million) as of June 30, 2012 from approximately RMB121.8 million as of December 31, 2011, primarily attributable to the increase of the prepayments to suppliers. Our prepayments and other receivables decreased to RMB121.8 million as of December 31, 2011 from RMB156.7 million as of December 31, 2010, primarily due to the decrease of value added tax receivables which were attributable to the value added tax incurred by Zhengtong for its purchase of equipment and materials in 2010 being offset by the value added tax paid on the products it sold in 2011, partially offset by an increase in our prepayment to suppliers for the materials and equipment components. Pursuant to PRC tax law, Zhengtong may offset such value added tax against future value added tax it is required to pay on its sales after it becomes operational. The prepayment to suppliers as of December 31, 2011 was attributable to our prepayment to suppliers for the materials and equipment components.

## Restricted bank deposits

Our restricted bank deposits increased to approximately RMB661.4 million (US\$104.1 million) as of June 30, 2012 from approximately RMB14.5 million as of December 31, 2011, primarily due to our issuing letters of credit and bank acceptances related to our increased import of bauxite and equipment.

Our restricted bank deposits were RMB14.5 million as of December 31, 2011 compared with approximately RMB82.7 million as of December 31, 2010, primarily due to the return of deposit in connection with letters of credit and bank borrowings that matured in 2011.

Our restricted bank deposits were RMB82.7 million as of December 31, 2010 compared with approximately RMB760.6 million as of December 31, 2009, primarily because a significant portion of the letters of credit issued in connection with the alumina agency business matured in the period. In addition, a decrease in our bills payable in 2010 further contributed to the decrease in our restricted bank deposits.

## Other payables

	l	As of December 31,		As of June 30,					
	2009	2010	2011	2012	2012				
	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)				
	(in thousands)								
Other deposits, payables and accruals	134,848	495,191	2,290,015	2,711,412	426,793				
Advance from customers	322,094	457,576	225,881	574,004	90,352				
Accrued payroll and welfare	18,821	10,990	14,123	23,880	3,759				
Other tax payable	372,296	205,145	114,564	51,522	8,109				
	848,059	1,168,902	2,644,583	3,360,818	529,013				

Other tax payable primarily includes VAT and other local tax. We had other tax payable of approximately RMB51.5 million (US\$8.1 million) as of June 30, 2012.

Our other payables increased to approximately RMB3,360.8 million (US\$529.0 million) as of June 30, 2012 from approximately RMB2,644.6 million as of December 31, 2011, primarily due to increases in advance from customers, payables related to construction projects and the purchase of equipment and materials, and quality deposits.

Our other payables increased by approximately 126.2% to approximately RMB2,644.6 million as of December 31, 2011 from approximately RMB1,168.9 million as of December 31, 2010 primarily due to an increase in our payables related to the purchase of equipment and materials in connection with our expanding production capacity.

Our other payables increased by approximately 37.8% to approximately RMB1,168.9 million as of December 31, 2010 from approximately RMB848.1 million as of December 31, 2009 primarily due to an increase in our other deposits, payables and accruals related to the purchase of equipment and material in connection with our expanding production capacity, partly offset by a decrease in our other tax payables.

## Income tax payable

We had income tax payable of nil, approximately RMB158.0 million, RMB137.9 million and RMB289.5 million (US\$45.6 million) as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively. Aluminum & Power generally pays income tax monthly shortly after the end of each month, and Shandong Hongqiao usually pays income tax quarterly shortly after the end of each quarter. As a result, we may have income tax payable at the end of a period to the extent we owe tax in the period. Our income tax payable as of December 31, 2010 and 2011 and June 30, 2012 were primarily due to this reason. In addition, the income tax payable is calculated based on an estimated profit agreed by the tax authority and us. During the year of 2009, we overestimated our net profit before taxation and paid amount larger than our actual income tax liability. As a result, we did not have any income tax payable as of December 31, 2009. We had paid taxes for the years 2010 and 2011 and the six months ended June 30, 2012 as of the date of the offering circular.

# Capital expenditure

Our capital expenditures comprised expenditures on property, plant and equipment. The following table sets forth our capital expenditures during 2009, 2010 and 2011 and the six months ended June 30, 2012:

	For th	1e year ended December	For the six months ended June 30,		
	2009	2010	2011	2012	2012 (US\$)
	(RMB)	(RMB)	(RMB)	(RMB)	
			(in thousands)		
Property, plant and equipment	1,089,144	2,949,476	9,153,533	5,577,482	877,929

Our capital expenditure on property, plant and equipment for the expansion of our manufacturing bases and our thermal power stations was approximately RMB5,577.5 million (US\$877.9 million) for the six months ended June 30, 2012 and the relevant capital commitment was approximately RMB11,146.5 million (US\$1,754.5 million).

## Capital commitments

The table below sets forth the breakdown of our capital commitments as of the dates indicated:

	A	As of December 31,			une 30,			
	2009	2010	2011	2012	2012			
	(RMB)(RMB)(RMB)(U(in thousands)(In thousands)(In thousands)(In thousands)							
Capital expenditure in respect of acquisition of property, plant and equipment								
<ul> <li>– contracted for but not provided</li> <li>– authorized but not contracted</li> </ul>	365,039	178,733	5,869,031	5,925,232	932,667			
for		2,650,614	8,541,440	5,221,300	821,864			
	365,039	2,829,347	14,410,471	11,146,532	1,754,531			

Our capital commitments increased significantly to RMB14,410.5 million as of December 31, 2011 from RMB2,829.3 million as of December 31, 2010, which was primarily due to the expansion of our manufacturing bases as well as the expansion of our electricity output. In addition, although we had entered into a number of construction contracts for the expansion of our Binzhou manufacturing base and the expansion of our thermal power stations, as certain of such construction contracts did not specify prices, the relevant capital commitments were recorded as authorized but not contracted for. Our capital commitment decreased to RMB11,146.5 million (US\$1,754.5 million) as of June 30, 2012 from RMB14,410.5 million as of December 31, 2011, primarily due to the fact that certain expansion work has been completed.

# Contingent liabilities

In June 2010, Aluminum & Power filed two separate claims against Wuhan Boiler Company Limited ("Wuhan Boiler", a boiler supplier of the Group), seeking (i) refund of deposits made by Aluminum & Power of RMB59 million for the acquisition of eight sets of boilers pursuant to two boiler purchase agreements entered into in 2007 (the "2007 Boiler Purchase Agreements"); and (ii) compensation of RMB10.9 million, totaling an aggregate claim of approximately RMB69.9 million, as Wuhan Boiler has not delivered boilers within the time frame as specified in the 2007 Boiler Purchase Agreements.

On March 4, 2011 and August 18, 2011, Wuhan Boiler initiated two separate legal proceeding against Aluminum & Power at Shandong Higher People's Court relating to the 2007 Boiler Purchase Agreements, seeking (i) for the agreement dated February 6, 2007, forfeiture of the deposit made by Aluminum & Power in the amount of RMB38.7 million, the unpaid price of goods of approximately RMB49.96 million and damages of approximately RMB61.3 million; (ii) for the agreement dated June 26, 2007, forfeiture of the deposit made by Aluminum & Power in the amount of RMB10 million, and damages of approximately RMB67.4 million; and (iii) relevant litigation expenses.

As of December 31, 2011, the Group has accrued in full the remaining contract sum in relation to the 2007 Boiler Purchase Agreement including unpaid price of goods in an aggregate amount of RMB49.96 million (the "Accrued Liabilities") in relation to the litigations brought by Wuhan Boiler.

On February 29, 2012, Mr. Zhang, the controlling shareholder of the Company, has agreed in writing to indemnify any losses that may be incurred by Aluminum & Power arising from the claims mentioned above in relation to the 2007 Boiler Purchase Agreement brought by Wuhan Boiler.

On March 27, 2012, the Group and Wuhan Boiler signed a settlement agreement relating to the 2007 Boiler Purchase Agreements. According to the settlement agreement, the Group should pay Wuhan Boiler RMB1.26 million (the deposit of RMB48.7 million deducted) by a monthly payment of RMB0.14 million from April 2012 to December 2012.

On July 11, 2003, Aluminum & Power and Wuhan Boiler entered into a boiler supply agreement, pursuant to which Wuhan Boiler agreed to provide Aluminum & Power with eight sets of boilers for approximately RMB424 million (the "2003 Boiler Purchase Agreement"). This boiler supply agreement was amended for several times with respect to its total price, delivery schedule and payment term in 2005 and 2006. As both parties had disputes regarding the interpretation of the terms with respect to the total price and quality deposits, on September 15, 2010, Wuhan Boiler initiated legal proceedings against Aluminum & Power at Shandong Higher People's Court, seeking for payment of the remaining contract sum and refund of quality deposit of approximately RMB52.3 million, damages of approximately RMB83.5 million, an overdue fine of approximately RMB57.5 million and the relevant litigation expenses.

On February 16, 2006 and May 24, 2006, Aluminum & Power and Wuhan Boiler entered into two boiler supply agreements (the "2006 Boiler Purchase Agreements"). Pursuant to the terms of each of the 2006 Boiler Purchase Agreements, Wuhan Boiler agreed to provide Aluminum & Power with eight sets of boilers. The total contract amount of each of the 2006 Boiler Purchase Agreements was approximately RMB104 million. On March 23, 2010, Aluminum & Power, Gaoxin and Wuhan Boiler entered into a contract for assigning the rights and obligations under both 2006 Boiler Purchase Agreements from Aluminum & Power to Gaoxin Aluminum & Power. Pursuant to the terms of this contract, Gaoxin has the primary responsibility to fulfill obligations under the 2006 Boiler Purchase Agreements and Wuhan Boiler had the right to seek performance by Aluminum & Power under the 2006 Boiler Purchase Agreements if Gaoxin refuses or fails to do so. As Wuhan Boiler and Gaoxin had disputes regarding the interpretation of the terms of the 2006 Boiler Purchase Agreements including the total price under these agreements, on November 8, 2010 and November 17, 2010, Wuhan Boiler respectively initiated legal proceedings against Gaoxin and Aluminum & Power at Shandong Higher People's Court, seeking, (i) for the agreement dated February 16, 2006, damages of approximately RMB51.51 million; (ii) for the agreement dated May 24, 2006, payment of remaining contract sum RMB32.7 million, payment of terminated loss of RMB13 million, damages of approximately RMB49.2 million, and overdue fine of approximately RMB47.6 million; and (iii) relevant litigation expenses.

As of December 31, 2011, quality deposits approximately RMB52.3 million in relation to the 2003 Boiler Purchase Agreements was included in other payable.

On January 16, 2011, Mr. Zhang, the controlling shareholder of the Company, has agreed in writing to indemnify any losses that may be incurred by Aluminum & Power arising from the claims mentioned above in relation to the 2003 Boiler Purchase Agreement brought by Wuhan Boiler. In addition, on the same date,

Chuangye Group has also agreed in writing to indemnify any losses that may be incurred by Aluminum & Power arising from the claims mentioned above in relations to the 2006 Boiler Purchase Agreement brought by Wuhan Boiler.

On March 27, 2012, the Group and Wuhan Boiler signed a settlement agreement relating to the 2003 Boiler Purchase Agreements and 2006 Boiler Purchase Agreements. According to the settlement agreement, the Group should pay Wuhan Boiler RMB1.1 million within 15 days after the settlement agreement became effective and RMB51.2 million by a monthly payment of RMB5.69 million from April 2012 to December 2012.

## Indebtedness

## Borrowings

As of June 30, 2012, we had total borrowings of RMB10,301.2 million (US\$1,621.5 million), which consisted primarily of bank borrowings. The following table sets forth our bank borrowings as of the dates indicated.

		As of December 31,		As of June 30,		
	2009	2010	2011	2012	2012	
	(RMB)	(RMB)	(RMB) (in thousands)	(RMB)	(US\$)	
Secured bank borrowings <sup>(1)</sup>	22,000	89,850	1,125,703	1,127,300	177,444	
Unsecured bank borrowings	1,022,492	3,944,000	6,066,500	6,913,439	1,088,216	
Total	1,044,492	4,033,850	7,192,203	8,040,739	1,265,660	

(1) Secured by bills receivable, restricted bank deposits and prepaid lease payment.

The following table sets forth information on our fixed-rate bank borrowings and floating-rate bank borrowings as of the dates indicated.

		As of December 31,	As of June 30,		
	2009	2010	2011	2012 (RMB)	2012 (US\$)
	(RMB)	(RMB)	(RMB) (in thousands)		
Fixed-rate bank borrowings	233,890	1,472,850	3,100,000	3,956,704	622,809
Floating-rate bank borrowings	810,602	2,561,000	4,092,203	4,084,035	642,851
	1,044,492	4,033,850	7,192,203	8,040,739	1,265,660

The following table sets forth information on the maturity profile of our bank borrowings as of the dates indicated.

	As of December 31,			As of June 30,		
	2009	2010	2011	2012	2012 (US\$)	
	(RMB)	(RMB)	(RMB) (in thousands)	(RMB)		
Banks borrowings repayable:						
Within one year	929,173	72,850	3,210,610	2,764,052	435,078	
In the second year	115,319	112,500	3,369,093	1,609,687	253,375	
In the third year	-	3,736,000	75,000	2,267,000	356,839	
In the fourth year	-	75,000	237,500	-	-	
In the fifth year	_	37,500	300,000	1,400,000	220,368	
	1,044,492	4,033,850	7,192,203	8,040,739	1,265,660	

The following table sets forth information on the currency denomination of our bank borrowings as of the dates indicated.

		As of December 31,		As of June 30,	
	2009	2010	2011	2012	2012
	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)
			(in thousands)		
Denominated in RMB	402,000	3,961,000	6,058,041	6,827,398	1,074,673
Denominated in United States Dollar ("US\$")	642,492	72,850	1,134,162(1)	1,213,341	190,987
	1,044,492	4,033,850	7,192,203	8,040,739	1,265,660

For our fixed interest rate borrowings, we are charged interest at the prevailing market rates, which ranged from 1.65% to 8.22%, 1.78% to 5.73%, 5.58% to 8.11% and 5.14% to 8.53% per annum for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. We are charged interest rates on our borrowings at floating rates based on the borrowing rates announced by the People's Bank of China. The effective weighted average annual rate for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012 were 4.88%, 5.60%, 6.58% and 6.27% per annum, respectively.

We previously had bank loans of RMB3,761.0 million that were guaranteed by Chuangye Group. These guarantees were released prior to November 2010.

We expect to draw down US\$460 million and HK\$320 million on or about September 25, 2012 from the J.P. Morgan Facility. See "Description of Other Material Indebtedness – Offshore Financing – The J.P. Morgan Facility."

For more information on our material indebtedness, see "Description of Other Material Indebtedness."

Save as aforesaid or as otherwise disclosed herein, and apart from intra-group liabilities, the Group did not have outstanding at the close of business on June 30, 2012 any loan capital issued and outstanding or agreed to be issued, bank overdrafts, loans, debt securities, or other similar indebtedness, liabilities under acceptances or acceptable credits, debentures, mortgages, charges, hire purchases commitments, guarantees or other material contingent liabilities. In 2011, we submitted to PRC regulators an application for approval to issue corporate bonds in the principal amount of approximately RMB2.6 billion through Shandong Hongqiao. As of the date of this document, we have not yet obtained approval for this proposed issuance. In addition, we are preparing an application for approval to issue medium term notes in the principal amount of approximately RMB3.0 billion.

As of June 30, 2012, the Group had other borrowings of approximately RMB1,341.8 million, which represented the loans of US\$152.0 million (RMB961.4 million) and HK\$466.7 million (RMB380.4 million). The loans were lent by three independent third parties for a term of two years and are unsecured and interest bearing. One executive director and one non-executive director of the Company once acted as directors of one of the three independent third parties.

# **Off-Balance Sheet Commitments and Arrangements**

As of June 30, 2012, we had not entered into any off-balance sheet transactions.

# Quantitative and Qualitative Disclosure about Market Risk

We are, in the normal course of business, exposed to market risk such as interest rate risks, risks relating to fluctuations in the selling prices of aluminum products, commodity prices and electricity purchase prices, liquidity risks, credit risks and foreign currency risks. Our risk management strategy aims to minimize the adverse effects of these risks on our financial performance.

<sup>(1)</sup> This RMB amount has been calculated using an exchange rate of 1 USD = RMB6.3009.

## Interest rate risk

Our interest rate risk is comprised of fair value interest rate risk and cash flow interest rate risk. Our fair value interest rate risk relates primarily to our fixed-rate bank borrowings which are subject to negotiation annually. Our cash flow interest rate risk relates primarily to our restricted bank deposits, bank balances and cash and floating interest rate bank borrowings. We currently do not use any derivative contracts to hedge our exposure to interest rate risk. However, our management will consider hedging significant interest rate exposure should the need arise.

## Aluminum products selling price risk

We derive a substantial majority of our revenue from the sale of aluminum products. As a result, our operating results are directly affected by the demand for and the price of aluminum products. The following table shows the decrease/increase in our revenue and gross profit in different scenarios, assuming all other factors remained the same, for the periods indicated:

	Decrease/ for 2		Decrease/i for 2		Decrease/ for 2		Decrease/i for the six ended June	months	Decrease/i for the six ended June	months
Decrease/increase in average selling price of our aluminum products	Revenue	Gross profit	Revenue	Gross profit	Revenue	Gross profit	Revenue	Gross profit	Revenue	Gross profit
					(RMB in )	millions)				
1.0%	86.7	86.7	144.5	144.5	229.3	229.3	109.9	109.9	122.5	122.5
5.0%	433.4	433.4	722.7	722.7	1,146.4	1,146.4	549.4	549.4	612.6	612.6
10.0%	866.9	866.9	1,445.4	1,445.4	2,292.8	2,292.8	1,098.7	1,098.7	1,225.1	1,225.1

# Commodity and electricity purchase price risk

Alumina is the major raw material used in the production of our products and the purchase of alumina accounted for approximately 30.7%, 36.4%, 36.8% and 35.7% of our total cost of sales for the three years ended December 31, 2011 and the six months ended June 30, 2012. Fluctuations in the commodity price of alumina will have a significant impact on our earnings, cash flows as well as the value of our inventories. See "Risk Factors – If we fail to obtain sufficient amounts of raw materials that meet our quality standards and at commercially acceptable prices, our business, financial condition and results of operations will be materially and adversely affected." In addition, we are exposed to commodity price risk from fluctuations in the price of aluminum as we generate our revenue primarily from sales of aluminum products in China. We have not entered into any derivative instruments or futures to hedge against any fluctuations in alumina or aluminum prices. Therefore, fluctuations of alumina and aluminum prices could have a significant effect on our revenue and profit for a given period.

The following table shows the increase in our purchase of alumina in different scenarios, assuming all other factors remained the same, for the periods indicated:

Increase in average purchase price of alumina	Increase in purchase of alumina for 2009	Increase in Increase in purchase of alumina for 2010 (RMB in millions)		Increase in purchase of alumina for the six months ended June 30, 2011	Increase in purchase of alumina for the six months ended June 30, 2012
		(	RMB in millions	;)	
1.0%	23.8	34.2	56.9	26.6	30.5
5.0%	119.1	171.1	284.4	133.1	152.3
10.0%	238.2	342.1	568.9	266.2	304.6

Electricity is a principal component of our costs and we face risks from fluctuations in the purchase price of electricity. See "Risk Factors – Risks Relating to our Business – If our electricity costs increase significantly or if we are unable to obtain sufficient electricity supply, our business, financial condition and

results of operations will be materially and adversely affected." We purchased electricity from external suppliers in an aggregate amount of approximately RMB3,210.6 million, RMB1,875.9 million, RMB3,511.0 million and RMB1,600.0 million (US\$251.9 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. This represented 41.3%, 20.0%, 22.7% and 18.8% of our total costs for 2009, 2010 and 2011 and the six months ended June 30, 2011 and the six months ended June 30, 2012, respectively.

The following table shows the increase in our purchase price of electricity from our external supplier in different scenarios, assuming all other factors remained the same, for the periods indicated:

Increase in average purchase price of electricity from external supplier	Increase in purchase of electricity from external supplier for 2009	Increase in purchase of electricity from external supplier for 2010	Increase in purchase of electricity from external supplier for 2011	Increase in purchase of electricity from external supplier for the six months ended June 30, 2011	Increase in purchase of electricity from external supplier for the six months ended June 30, 2012
		(	RMB in millions	)	
1.0%	32.1	18.8	35.1	17.9	16.0
5.0%	160.5	93.8	175.5	89.7	80.0
10.0%	321.1	187.6	351.1	179.3	160.0

The following table sets forth, assuming that we purchased alumina at the average spot market price in China for the three years ended December 31, 2011 and the six months ended June 30, 2012 and we purchased electricity at the benchmark price of Shandong Province for the year ended December 31, 2011 and the six months ended June 30, 2012, which were higher than our average purchase prices of alumina and electricity, and that all other factors, including change in inventories, remained unchanged, the impacts on our net profits for the periods indicated:

	Year ended December 31,			Six months ended June 30					
	2009	2010	2011	2011	2012				
	(RMB in millions)								
Net profit of continuing operations									
(before minority interests)	577.1	4,188.7	5,875.4	2,906.1	2,840.4				
Difference of alumina <sup>(1)</sup>	(300.5)	(1,154.6)	(988.1)	(594.4)	(593.4)				
Difference of electricity <sup>(2)</sup>	_	(130.8)	(634.3)	(245.3)	(289.1)				
Adjusted net profit of continuing									
operations (before minority									
interests) <sup>(3)</sup>	276.6	2,903.3	4,253.0	2,066.4	1,957.9				

(1) Difference of alumina: actual purchase volume of alumina for the relevant period × (weighted average actual purchase price of alumina by our Group for the relevant period – average spot market price of alumina in China for the relevant period) × (1-statutory tax rate of the relevant period)

(2) Difference of electricity: actual purchase volume of electricity for the relevant period × (weighted average actual purchase price of electricity by our Group for the relevant period – benchmark price of Shandong Province for the relevant period) × (1-statutory tax rate of the relevant period)

(3) As our average coal consumption costs were higher than the Qinhuangdao price of coal with an average calorific value of 5,000 kilocalories during the three years ended December 31, 2011 and the six months ended June 30, 2012, it is not necessary to make the adjustment to our financial results based on coal price changes.

## Liquidity risk

We had net current liabilities as of December 31, 2009 of approximately RMB2,654.0 million as we took advantage of the financing from amounts due to related parties to partly finance our operation in 2009 and

utilized short-term bank borrowings for expanding our business. See "Risk Factors – We had net current liabilities as of December 31, 2009." The majority of our liabilities are short-term, consisting mainly of trade payables, bills payable, amounts due to related parties and short-term bank borrowings, giving rise to our net current liabilities position. We also have limited trade receivables as we generally receive advances from customers. As of December 31, 2010 and 2011 and June 30, 2012, we had net current assets of approximately RMB2,838.2 million, RMB3,654.5 million and RMB3,555.7 million (US\$559.7 million), respectively.

We have built a liquidity risk management framework for the management of our short-, medium- and long-term funding and liquidity requirements. We monitor and maintain a level of cash and cash equivalents that our management deems adequate to finance our operations for the coming 12 months and mitigate the effects of fluctuations in cash flows. We rely on cash generated from operating activities as a significant source of liquidity. Other than cash generated from operating activities, we rely on bank loans. Our management monitors our utilization of bank borrowings and compliance with loan covenants. In addition, we have established a team to review and forecast our working capital situation on a regular basis.

# Credit risk

We are exposed to credit risk primarily arising from trade receivables, bills receivable, other receivables, amounts due from related parties, bank balances and deposits. At the end of each reporting period, our maximum exposure to credit risk which may result in a financial loss due to the failure to discharge an obligation by the counterparties is represented by the carrying amount of the respective recognized financial assets stated in the combined statement of financial position.

We have concentration of credit risk in respect of bills receivable as the Group's bills receivable from our top customer amounted to RMB386.0 million, RMB511.7 million, RMB598.0 million and RMB507.3 million (US\$79.9 million), representing 51%, 58%, 46% and 36% of the total bills receivable as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively. Our top five bill receivables amounted to RMB620.2 million, RMB772.7 million, RMB1,200.0 million and RMB1,127.3 million (US\$177.4 million), representing 81%, 87%, 91% and 79% of our total bills receivable as of December 31, 2009, 2012, respectively. The credit risk on bills receivable is limited because our significant bills receivable are bank acceptances with various banks of good credit ratings.

The credit risk on liquid funds is limited because such amounts are placed with various banks with good credit ratings. Other than concentration of credit risk on liquid funds which are deposited with several banks with high credit ratings, we do not have any other significant concentration of credit risk.

In order to minimize our credit risk, our management has delegated a team responsible for the determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, we review the recoverable amount of each individual debt at the end of each reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. By these measures, we consider that our credit risk is significantly reduced.

# Foreign currency risk

We collect all of our revenue in RMB and incur most of our expenses as well as our capital expenditures in RMB. Certain bank balances and borrowings are denominated in foreign currencies which expose us to currency risk. See "Risk Factors – Risks Relating to Doing Business in the PRC – We face foreign exchange and conversion risks, and fluctuations in the value of the RMB may have a material adverse effect on your investment." If the exchange rate of USD to RMB had increased/decreased by 5% while all other variables remained constant, our profit for 2009, 2010 and 2011 and the six months ended June 30, 2012 would have decreased/increased by approximately RMB26.6 million, RMB2.6 million, RMB41.8 million and RMB79.9 million (US\$12.6 million), respectively. We have not used any financial instruments to hedge against currency risk. However, our management monitors foreign exchange exposure and may consider hedging significant foreign currency exposure should the need arise.

## **Non-GAAP Financial Measures**

We use EBITDA to provide additional information about our operating performance. EBITDA refers to our profit from continuing operations before the following items:

- interest income/expense;
- amortization of intangible assets;
- income tax expense; and
- depreciation.

EBITDA is not a standard measure under U.S. GAAP or IFRS. As the aluminum product manufacturing business in the PRC is capital intensive, capital expenditure requirements and levels of debt and interest expenses may have a significant impact on the profit for the year/period of companies with similar operating results. Therefore, we believe the investor community commonly uses this type of financial measure to assess the operating performance of companies in our market sector.

As a measure of our operating performance, we believe that the most directly comparable IFRS measure to EBITDA is profit for the year/period. We use EBITDA in addition to profit for the year/period because profit for the year/period includes many accounting items associated with capital expenditures, such as depreciation, as well as non-operating items, such as amortization of prepaid lease payments and interest income and interest expense. These accounting items may vary between companies depending on the method of accounting adopted by a company. By minimizing differences in capital expenditures and the associated depreciation expenses as well as reported tax positions, prepaid lease payments amortization and interest income and expense, EBITDA provides further information about our operating performance and an additional measure for comparing our operating performance with other companies' results. Funds depicted by this measure may not be available for debt service due to covenant restrictions, capital expenditure requirements and other commitments.

The following table reconciles our profit for the year/period under IFRS to our definition of EBITDA of the period indicated.

	Year Ended December 31,			Six months ended June 30,						
	2009	2010	2011	2011	2012	2012				
	(RMB)	(RMB)	(RMB)	(RMB)	(RMB)	(US\$)				
		(in thousands)								
Profit before taxation Adjustment	774,007	5,584,584	7,953,871	3,939,957	3,859,818	607,558				
Interest income	(8,714)	(8,639)	(11,156)	(7,681)	(16,091)	(2,533)				
Finance costs	89,243	192,990	300,819	133,364	259,684	40,876				
Depreciation and amortization	392,594	601,081	848,347	388,331	609,298	95,907				
EBITDA	1,247,130	6,370,016	9,091,881	4,453,971	4,712,709	741,808				

You should not consider our definition of EBITDA in isolation or construe it as an alternative to profit for the year/period or as an indicator of operating performance or any other standard measure under IFRS. Our definition of EBITDA does not account for taxes and other non-operating cash expenses. Our EBITDA measures may not be comparable to similarly titled measures used by other companies.

### **INDUSTRY OVERVIEW**

Certain information and statistics set out in this section have been extracted from various government publications, market data providers and other independent third party sources. We believe that the sources of this information are appropriate sources for such information and have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. The information has not been independently verified by us or any other party and no representation is given as to its accuracy. Accordingly, such information should not be unduly relied upon.

## Overview

The aluminum industry is the world's second largest metals industry, after steel. The global consumption of primary aluminum in 2011 was approximately 45.6 million tons according to Antaike. Primary aluminum is made from alumina (which is typically made from bauxite). Primary aluminum is processed into various fabricated products, such as rolled sheet, coil and plate, extruded bars and sections, wire-rod, castings and forgings.

Aluminum has a relatively short history as an industrial metal. Its widespread use only became viable in the late 19th century, with the discovery of the Hall-Heroult process for the electrolytic smelting of aluminum, and the Bayer process for the production of alumina. Both processes are still in use today as the main (indeed almost exclusive) processes for producing aluminum and alumina.

Aluminum is an abundant element in nature, but its principal commercial ore is bauxite. Bauxite is largely found in tropical areas of the world, with the main global reserves located in Guinea, Australia, Brazil, India and Jamaica. From bauxite, aluminum is produced in two stages. Bauxite is processed in an alumina refinery to produce alumina  $(Al_2O_3)$ , an oxide of aluminum. Other than being used to produce alumina, bauxite can be used to produce alumina cement, refractory materials, or be used in casting. Alumina is then processed into primary aluminum in an electrolytic smelter. There are two smelting technologies involved in the electrolytic process commonly used to produce primary aluminum: the "Söderberg" or "self-baking" technology and the "pre-baked" technology. According to Antaike, all production facilities using the "Söderberg" or "self-baking" technology have been eliminated in the PRC, due to its higher electricity consumption and pollutive emissions compared to the "pre-baked" technology. Aluminum produced by refining waste aluminum produces is called secondary aluminum. As an industry standard, primary aluminum includes pure aluminum and aluminum alloy. Primary aluminum products are categorized as upstream aluminum products in this document. Our products include molten aluminum alloy, aluminum alloy ingots, aluminum casting-rolling products and aluminum busbars.

Aluminum and aluminum alloys have a broad range of end-uses. Currently, the main uses of aluminum and aluminum alloys include construction (windows, doors, cladding, façades), transport (in road vehicles, aircraft, railcars and marine uses), electrical (cable and wire), consumer durables, and others.

#### **Global Aluminum Industry**

With broad end-use markets, aluminum consumption has been particularly leveraged to the GDP growth and industrial production. The chart below summarizes the positive correlation between per capita consumption of aluminum and GDP per capita in countries with different degrees of economic development. As illustrated in the chart below, developing countries (bottom left-hand quadrant) generally, on a per capita basis, consume less aluminum than developed countries (top right-hand quadrant) on a per capita basis in 2011. As the GDP per capita of developing countries in the lower left quadrant, such as China, India and Brazil, increases, the consumption of aluminum on a per capita basis is expected to increase. Aluminum demands in these developing countries have significant growth potential.



Source: Antaike

From 2006 to 2011, worldwide consumption of primary aluminum had grown at a CAGR of 5.8%, mainly driven by strong demand from emerging markets, especially from China, India and Brazil. During the global economic downturn, global consumption of primary aluminum fell in 2009 by 6.6%. However, the global demand for primary aluminum recovered with a growth of 19.3% in 2010. The demand for primary aluminum increased by 7.9% in 2011 in China, primarily due to re-stocking and governmental incentive measures to promote the consumption of durable goods and vehicles.

Antaike forecasts that primary aluminum consumption between 2011 and 2016 will grow at a CAGR of 5.5% globally (as the following chart shows).



Source: Antaike
#### **PRC** Aluminum Industry

# Geographical Distribution of Aluminum Production and Consumption in China

The map below shows the geographical distribution of aluminum production and consumption in China for 2011 (as percentages of total production, consumption, and downstream fabricated products produced in China):



Source: Antaike

Notes: Definition of the regions is provided by Antaike as follow:
East region – Shandong, Jiangsu, Anhui, Zhejiang, Jiangxi, Fujian and Shanghai
North-east region – Heilongjiang, Jilin and Liaoning
Mid-south region – Henan, Hubei, Hunan, Guangdong, Guangxi and Hainan
South-west region – Sichuan, Yunnan, Guizhou, Chongqing and Tibet
North-west region – Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang
North region – Beijing, Tianjin, Hebei, Shanxi and Inner Mongolia

Chinese aluminum manufacturers are distributed across 21 provinces in China. They are concentrated in provinces with rich bauxite resources and electricity cost advantages. In the downstream sector, aluminum fabricating plants tend to be located in close proximity to the smelting plants.

East China region, including Shandong Province, where our production facilities are located, is the second largest aluminum consuming region in China, representing 30.6% of the country's aluminum consumption for 2011. Within this region, the Yangtze River Delta is the most important and developed economic and manufacturing center in China.

#### Strong domestic demand

Aluminum consumption in China has experienced rapid growth in the last two decades due to strong and continuous economic growth. According to the National Bureau of Statistics of China, China's gross domestic product expanded at a CAGR of approximately 15.7%, from RMB10,965.2 billion in 2001 to RMB47,156.4 billion in 2011, while its industrial production increased from approximately RMB4,358.1 billion in 2001 to approximately RMB18,857.2 billion in 2011, representing a CAGR of 15.8%. We believe the macroeconomic environment in China has contributed, and will continue to contribute, to the increase of China's demand for aluminum.

China has been a key driver of the global aluminum industry over the past decade, and has surpassed the US as the largest aluminum consumer globally since 2005. In 2011, China consumed approximately 20.1 million tons of primary aluminum, representing 44.0% of world total consumption. This ratio increased from 22.3% in 2005 and is expected to reach 50.1% by 2015, according to Antaike. The chart below shows the breakdown of domestic aluminum consumption by end-use in China in the first half of 2012.



Source: Antaike

According to the forecast of Antaike, China's domestic aluminum consumption will continue to grow across sectors in 2012, which is summarized in the table below:

Packaging	22.5%
Electrical	11.6%
Machinery	8.3%
Transport	8.1%
Durables	7.9%
Construction	5.5%
Others	8.8%

Despite the strong growth in the past decade, China's aluminum consumption on a per capita basis is still below that in the developed economies. The table below sets forth an overview of the aluminum consumption in China and the United States, Japan, Germany and Canada in 2011.

# Aluminum consumption data in 2011

Country	Total Aluminum Consumption	Per Capita Aluminum Consumption	Per Capita GDP	
	(thousand tons)	(kg)	(US\$)	
United States	4,800	15.3	47,132	
Japan	1,700	13.2	42,325	
Germany	2,190	26.8	40,512	
Canada	700	20.5	45,888	
China	20,050	14.9	5,450	

Source: EIU and Antaike

Primary aluminum can be processed into various downstream fabricated products including flat-rolled products (plates, sheets, strips and foils), extrusion products (tubes, bars and profiles), wire-rod, castings and forgings. As the chart below shows, total production of fabricated aluminum products in China increased rapidly at a CAGR of 20.2% from 2006 to 2011, and is expected to grow at a CAGR of 8.0% from 2011 to 2016, which will support the future growth of demand for aluminum products in China.



#### Source: Antaike

In particular, there are significant growth potentials in the industries of construction and automotives in China.

#### Construction

Aluminum products are widely used in windows, doors, cladding and facades in the construction sector. According to the National Bureau of Statistics of China, the total investment in fixed assets in China grew from approximately RMB11,000 billion in 2006 to approximately RMB27,812.2 billion in 2010, representing a CAGR of 26.1%. The growth momentum is expected to continue with overall economic growth and growing urbanization, as well as increases in disposable income per capita in China. According to Antaike, over 350 million additional population in China will be domiciled in urbanized areas by 2025. Combined with the structural change of consumer spending behavior, this will support China's aluminum demand growth in the long term.

#### Automotives

The strong economic growth, improving road transportation infrastructure and the enhanced consumer purchasing power have been driving up demand for automotives in China. Total vehicle ownership in China grew at a CAGR of 16.0% from 2005 to 2010, and China surpassed the United States to become the world's largest auto producer in 2009. However, China's car ownership on a per capita basis is still much lower compared to the developed countries. Furthermore, higher energy prices and more stringent regulation on carbon emissions will encourage a more extensive use of lightweight metals, such as aluminum, as a substitute for steel in the automotive sector. Antaike estimates the aluminum usage in China is currently 93 kg per vehicle, as compared to 145 kg in the developed nations. Antaike further estimates the per vehicle aluminum usage in China to increase to 125 kg by 2015. Taken together with the growing vehicle production, it is expected to further drive growth in aluminum demand in China.

Antaike estimates that China's primary aluminum consumption will grow at a CAGR of 8.9% from 20.1 million tons in 2011 to 30.7 million tons in 2016, as shown in the chart below.



Source: Antaike

#### Growing domestic production

In 2001, China became the largest aluminum manufacturer in the world, surpassing the United States and Russia. Domestic production increased at a CAGR of 15.8% from 9.4 million tons in 2006 to 19.6 million tons in 2011, compared to the CAGR of 6.3% globally during the same period, while China's share of global aluminum output rose from 27.7% to 42.6% during the same period, according to Antaike. The rapid growth of aluminum production is mainly driven by domestic consumption, government support and advanced technology. As the chart below shows, Antaike expects that the primary aluminum output will increase at a CAGR of 10.1% from 2011 to 2016, exceeding the growth of capacity. Historically China industry average utilization rates were 80.7%, 76.6% and 79.0% for 2010, 2011 and the six months ended June 30, 2012, respectively.



Source: Antaike

There has also been a sector trend of increasing scale in terms of production capacity and smelter power in the PRC aluminum industry. Average annual production capacity per aluminum manufacturer in China increased significantly from approximately 36,000 tons in 2001 to approximately 256,000 tons as of December 31, 2011. Meanwhile, capacity associated with over 300 kA smelters now accounts for approximately 49.8% of total domestic aluminum capacity.

#### Overview of domestic downstream fabrication sector

Aluminum is further processed into aluminum fabrication products through reheating, molding, casting, cutting, extruding and shaping processes. The rapid growth in recent years has made China both the largest consumer and manufacturer of aluminum fabricated products in the world since 2001 and 2005, respectively, according to Antaike. Aluminum flat-rolled products and aluminum extraction products are the two key segments in the PRC downstream fabrication sector accounting for approximately 85% of total aluminum fabrication production, according to Antaike, and are also the two downstream fabrication segments that the Company plan to expand in the future.

In 2011, China consumed approximately 21.4 million tons of aluminum fabricated products, according to Antaike. The chart below shows the breakdown of domestic aluminum fabricated product consumption by end-use in 2011. The main users of aluminum fabricated products are from the construction, electrical, aluminum foil billets and consumer product sectors.



#### Source: Antaike

Although transportation and packaging only account for a small share (accounting for 4.0% and 2.6% of current fabricated aluminum product consumption in the PRC, respectively) in 2011, we believe they represent two of the key drivers of future demand growth for aluminum fabricated products, given the significant growth potentials in tin cans, food packaging, automotives and urban subway in China. As a result, Antaike estimates that China's aluminum fabricated product consumption will grow steadily at a CAGR of 7.0% from 2011 to 2016, as shown in the chart below.





Source: Antaike

# Price

# Historical price overview

Aluminum price has experienced significant fluctuations in the past. The following chart shows aluminum 3-month London Metal Exchange, or the LME, price and 3-month Shanghai Futures Exchange, or the SHFE, price from January 1999 to date. The period from 2005 to 2007 witnessed the most substantial increase in aluminum prices since the late 1980s. The rally in price was primarily driven by the emergence of China as a major consumer of aluminum as Chinese domestic demand increased by 160% between 2003 and 2008. Price continued to rise in 2008 until reaching the highest point in July 2008 of US\$3,380 per ton (3-month LME). The global financial crisis caused aluminum prices to fall sharply after the peak in July until the first quarter of 2009. Since then, aluminum price has recovered strongly and the 3-month LME price and 3-month SHFE averaged US\$1,699 per ton and RMB13,456 per ton, respectively, in 2009, US\$2,198 per ton and RMB16,104 per ton, respectively, for 2010, US\$2,422 per ton and RMB16,870 per ton, respectively, for 2011, and US\$2,116 per ton and RMB16,112 per ton, respectively, for the six months ended June 30, 2012, according to Antaike. During the same period, the LME spot price and SHFE averaged US\$1,665 per ton and RMB13,617 per ton, respectively, for 2009, US\$2,173 per ton and RMB15,791 per ton, respectively, for 2010, US\$2,398 per ton and RMB16,833 per ton, respectively, for 2011 and US\$2,077 per ton and RMB16,013 per ton, respectively, for the six months ended June 30, 2012.



Source: Antaike

#### Price outlook

According to Antaike, the 3-month SHFE aluminum prices are expected to remain stable but higher than historical averages over the next five years. The chart below illustrates the historical and forecast average 3-month SHFE aluminum prices provided by Antaike.



Source: Antaike

#### **Cost Overview**

Competition in aluminum industry is principally based on costs. The main costs of converting alumina into aluminum are electricity, alumina, processing, labor, and carbon anode blocks. The chart below shows the breakdown of production cost for Chinese aluminum manufacturers in 2011, in which electricity and alumina were the two largest causes for variation in production costs between aluminum manufacturers, representing 45% and 33% of total cost, respectively. Therefore, the main competitive advantage in the aluminum industry are access to stable supply and sustainable low cost of electricity and alumina. The per ton unit cost of our aluminum products sold, was RMB9,227 per ton for the six months ended June 30, 2012, compared with an industry average of RMB13,650 per ton in China for the six months ended June 30, 2012, according to Antaike. See "Financial Information – Description of the Major Components of Our Results of Operations – Continuing operations – Cost of sales."



(1) Calculated based upon our actual costs of producing the products sold

## Electricity cost

The electricity costs vary across different regions and aluminum manufacturers in China. The industry average unit electricity cost has been increasing since 2002. In 2011 and the first six months of 2012, the average unit electricity cost reached RMB0.51/kWh (inclusive of VAT; RMB0.44/kWh exclusive of VAT). On a per ton basis, electricity cost was RMB5,974 and RMB5,983 per ton aluminum for 2011 and the first six months ended June 30, 2012, respectively.



#### Source: Antaike

#### 1. Inclusive of VAT.

With the rapid growth of aluminum smelting capacity in China, the electricity supply to this sector has been increasingly tight, particularly in the last decade. The electricity used in aluminum production accounted for 6.5% of China's total electricity output in 2011, as compared to that of 3.2% in 2000. Therefore, according to Antaike, the aluminum manufacturers with capacity to generate electricity in-house can enjoy secure stable supply and lower cost of electricity compared to those purchasing electricity externally. In 2011, aluminum manufacturers representing approximately 48.9% aluminum capacity in China owned power stations. The electricity price is largely linked with the price of coal. According to Antaike, the average price of mix-quality coal quoted by Qinhuangdao Shanxi quality index was RMB600 per ton, RMB746 per ton and RMB823 per ton in China for 2009, 2010 and 2011, respectively.

#### Alumina cost

Alumina is another major cost to aluminum production. According to Antaike, China had total annual alumina production capacity of 51.4 million tons by the end of 2011 while the actual alumina domestic production in 2011 amounted to 39 million tons. The major alumina manufacturers are located in the Shandong, Henan, Shanxi and Guangxi provinces, among which Shandong and Henan are China's largest alumina producing provinces, representing 33% and 24% of China's total capacity in 2011, respectively. The geographical distribution of the alumina production capacity is shown in the chart below.



Source: Antaike

In 2011, China was still a net importer of alumina, with net import of 1.9 million tons, accounting for 4.8% of total domestic alumina consumption of the same period, which was because certain aluminum producers chose to import alumina based on considerations such as price, their proximity to seaports, product quality, long-term contracts and other factors that made import of alumina more favorable to them. The main countries China imports from are Australia and India. The chart below shows the supply and import dynamics of alumina in China.



Source: Antaike

According to Antaike, the average prices of alumina produced domestically in China were RMB2,340 per ton, RMB2,750 per ton and RMB2,700 per ton for 2009, 2010 and 2011, respectively, and the average import price of alumina in China was US\$254 per ton, US\$348 per ton and US\$376 per ton during the same periods. In 2011 and the first six months of 2012, alumina cost accounted for RMB4,426 and RMB4,359 per ton of aluminum produced respectively.

#### **Competitive Landscape**

As of December 31, 2011, there were a total of 100 aluminum manufacturers in China, according to Antaike. They are located in 21 provinces, with Henan, Shandong and Inner Mongolia as the three largest producing provinces, accounting for 18.0%, 17.2% and 9.1% of domestic capacity as of December 31, 2011, respectively. The following chart sets forth the top ten aluminum manufacturers in China in terms of aggregate designed annual aluminum production capacity as of June 30, 2012 based on a report issued by Antaike, according to which we were the fourth largest aluminum manufacturer.

Rank	Company	Designed annual production capacity as of June 30, 2012	Nature of Ownership
		(thousand tons per annum)	
1	Group 1	4,630	State-owned
2	Group 2	2,850	State-owned
3	Group 3	2,220	Private
4	China Hongqiao Group Limited (our Group)	1,776	Private
5	Group 4	1,050	State-owned
6	Group 5	1,000	State-owned
7	Group 6	856	Private
8	Group 7	853	State-owned
9	Group 8	840	Private
10	Group 9	815	Private
Total	(% of China)	16,890 (61%)	

#### Top ten aluminum manufacturers in China

#### Source: Antaike

As of June 30, 2012, these ten manufacturers had aggregate designed annual production capacity of approximately 16.9 million tons and accounted for an aggregate of approximately 61% of China's domestic capacity. The table below shows the breakdown of aluminum manufacturers by production capacity as of December 31, 2011. The aluminum industry has historically been dominated by large state-owned enterprises. However, private players, such as our Group, have gradually expanded their market share.

#### Breakdown of aluminum manufacturers by designed capacity (as of December 31, 2011)

Designed Annual Production Capacity	Number of Companies	% of Total Capacity in China
(thousand tons per annum)		
< 200	57	18%
> 200 and < 500	29	10%
> 500	14	72%
China	100	100%

#### Source: Antaike

In May 2009, the Non-ferrous Metals Industrial Restructuring and Revitalization Plan (有色金屬產業調整 和振興規劃) was issued by the State Council as part of a national initiative to strengthen and streamline the development of the aluminum industry for the period from 2009 to 2011. The plan imposes strict restrictions on expansion of upstream aluminum capacity. In principle, China will not approve further construction or expansion of upstream aluminum smelting capacity from 2009 to 2011. The plan also sets forth a target of increasing the proportion of production by the top 10 aluminum manufacturers to 70% in 2011. Furthermore, according to the Notice to Further Strengthen the Elimination of Smaller Capacities (關於進一步加強淘汰落後產能工作的通知) issued by the State Council in February 2010, all production capacity with smelter working current intensity of 100 kA and below will be phased out by the end of 2011.

Our existing production lines are equipped with "pre-baked" smelters with working current intensity of 240 kA and 320 kA and as such are unaffected by the aforementioned policy to phase out smaller production capacity. See "Business – Our Production Facilities." As such, we believe that the aforementioned policies will not have an adverse impact on the operations of our Group. Furthermore, we believe that these policies will help to limit the addition of new capacity and improve the current over-capacity situation. In the long run, we believe the aforementioned policies will promote healthy and sustainable development of the domestic aluminum industry and thus will be beneficial for us.

The PRC governmental authorities have promulgated a series of policies on the aluminum industry recently, including the Opinions on Curbing Excess Capacity in Some Industries and Redundant Construction for the Healthy Industrial Development (關於抑制部分行業產能過剩和重複建設引導產業健康發展的若干意見) dated as of September 26, 2009 issued by the NDRC, the Ministry of Industry and Information Technology, the Ministry of Supervision, the Ministry of Finance, the Ministry of Land Resources, the Ministry of Environmental Protection, the People's Bank of China, the General Administration for Quality Supervision and Inspection, China Banking Regulatory Commission and CSRC, and the Guiding Opinions on Further Supporting the Restructuring and Revitalization of Key Industries and Curbing Overcapacity in Some Industries through Financial Services (關於進一步做好金融服務支持重點產業調整振興和抑制部分行業產 能過剩的指導意見) promulgated on December 22, 2009 by the People's Bank of China, China Banking Regulatory Commission, or the Policies. The Policies are aimed at restricting the investment in industries with excess production capacity, including production of electrolytic aluminum. In 2011, the PRC government increased twice the electricity tariff, which increased the cost of aluminum producers that purchased on-grid electricity. Our Group was not impacted by these increases.

Our PRC legal advisors, Zong Heng Law Firm, have advised us that we have obtained the necessary approvals and permits and completed all material filings for our production facilities both in operation and under construction, and such projects are in compliance with relevant industry policies. Our Directors believe that the Policies do not have any material adverse impact on the operation of our Group. See "Regulation Overview – Entry Conditions and Industry Policies."

#### Competition in the Aluminum flat-rolled Products and Aluminum Extrusion Products Segments

Precise aluminum products are advanced aluminum fabrication products, mainly including aluminum cans; high-grade aluminum foil and other high-grade aluminum flat-rolled products, and seamless pipes and other aluminum extrusion products. According to Antaike, there were approximately 230 aluminum sheets and cords manufacturers and 135 aluminum foils manufacturers in China as of December 31, 2011, with total production capacities of 8,550,000 and 2,200,000 tons per annum, respectively. The two tables below list out the top five aluminum sheets and cords manufacturers and top five aluminum foils manufacturers in China.

Company	Designed capacity as of December 31, 2011	Nature	
	(thousand tons per annum)		
Group 1	979	State-owned	
Group 2	225	Private	
Group 3	200	Private	
Group 4	155	Private	
Group 5	140	Private	
Total (% of China)	1,699 (20%)		

# Top five aluminum sheet and cord manufacturers in China

Source: Antaike

# Top five aluminum foil manufacturers in China

Company	Designed capacity as of December 31, 2011	Nature	
	(thousand tons per annum)		
Group 1	130	Private	
Group 2	85	Private	
Group 3	75	Private	

Company	Designed capacity as of December 31, 2011	Nature
	(thousand tons per annum)	
Group 4	70	State-owned
Group 5	65	State-owned
Total (% of China)	425 (19%)	

Source: Antaike

For aluminum extrusion products, as of December 31, 2011, there were approximately 860 manufacturers in China with a total production capacity of 17,700,000 tons per annum, according to Antaike. The table below lists out the top five aluminum extrusion product companies in China.

#### Top five aluminum extrusion product manufacturers in China

Company	Designed capacity as of December 31, 2011	Nature	
	(thousand tons per annum)		
Group 1	590	Private	
Group 2	250	Private	
Group 3	210	Private	
Group 4	160	Private	
Group 5	150	Private	
Total (% of China)	1,360 (8%)		

#### Source: Antaike

We understand that there are a number of barriers to enter into the aluminum industry, such as substantial capital expenditure requirement, time required to construct aluminum smelters, availability of low-cost energy supplies and raw materials, government restrictions on expanding aluminum smelting capacity until 2011, time and efforts to establish relationship with downstream customers and proximity to end-use markets.

#### Overview of Shandong Aluminum Industry and Molten Aluminum Alloy

#### Shandong Aluminum industry

Shandong Province, located on China's eastern coast, is one of the most important regions of the Chinese aluminum industry. As of December 31, 2011, it had a designed aluminum production capacity of approximately 4.4 million tons, which made it the second-largest aluminum production base in China, accounting for approximately 17.2% of total domestic capacity. In addition, Shandong Province is China's largest alumina supply base, with an annual capacity of approximately 16.9 million tons in 2011, accounting for 33% of domestic alumina capacity.

Shandong Province is also China's third-largest manufacturing base of downstream aluminum fabricated products, and manufactured approximately 2.3 million tons, or 9.7% of China's total production for the year ended December 31, 2011.

As of December 31, 2011, there were 9 aluminum manufacturers in Shandong Province. The three largest manufacturers accounted for approximately 85.1% of total designed annual capacity in Shandong Province. The table below sets forth the top five aluminum manufacturers in Shandong Province by designed annual production capacity.

## Top five aluminum manufacturers in Shandong Province

Company	Designed annual capacity as of June 30, 2012
	(thousand tons)
China Hongqiao Group Limited (our Group)	1,776
Shandong Group 1 <sup>(1)</sup>	1,100
Shandong Group 2	856
Shandong Group 3	200
Shandong Group 4	141
Total (as a % of total Shandong Province)	4,073 (93%)

Source: Antaike

(1) Shandong Group 1 also has a production capacity of 1,120,000 tons per annum outside Shandong Province. Its total capacity is 2,220,000 tons per annum and is referred to as Group 3 in the table headed "Top ten aluminum manufacturers in China" under "Industry Overview – Competition Landscape."

Our primary production facilities are strategically located in Zouping County, one of the main aluminum production bases in Shandong Province. There are two aluminum manufacturers in Zouping County, Zouping Aluminum Co., Ltd. and us, with a total designed annual capacity of 1,917,000 tons per annum as of June 30, 2012, according to Antaike. We represented approximately 40% and 93% of total designed annual capacity in Shandong Province and Zouping County, respectively, as of December 31, 2011 according to Antaike report. As such, our Directors believe that we have a dominant market position in Zouping County.

# Overview of molten aluminum alloy

Molten aluminum alloy refers to a red and yellow hot liquid, in which aluminum is the predominant metal, while combined with copper, zinc, manganese, silicon, magnesium or other materials. It is an important material for fabricating aluminum products and is directly transported to the nearby manufacturing site for further processing. As the temperature needs to be maintained at 750°C to 900°C level to keep it in liquid form during delivery, Antaike estimates that safe delivery distance for molten aluminum alloy is within 30 kilometers. Compared to aluminum ingots, molten aluminum alloy has a number of key benefits:

# Reduction of energy consumption and waste gas emission

Because there is no need to mold or re-smelt molten aluminum alloy before it is processed into downstream aluminum products, it offers significant savings of energy and electricity. It also benefits the overall environment through reducing the emission of carbon dioxide and waste gas during the re-melting process.

#### Cost saving

Molten aluminum alloy saves molding costs, and associated energy, labor, storage and other relevant costs for producers. Customers also benefit from saving the energy cost of melting aluminum alloy ingots for further processing, as well as labor and storage costs. Antaike estimates the overall cost benefits for customers to be approximately RMB500 per ton.

#### BUSINESS

#### **OVERVIEW**

We are the fourth-largest aluminum product manufacturer in China. We have vertically integrated operations that cover the entire aluminum industry value chain consisting of production facilities for alumina, molten aluminum alloy and aluminum alloy ingot, aluminum fabrication production facilities as well as power generation facilities.

We believe that we enjoy sustainable profitability because of our vertically integrated business model, our cost advantages and high operational efficiency and through centralized procurement of raw materials and electricity locally. We are strategically headquartered in Zouping County, Shandong Province, within an end-to-end industrial aluminum production cluster that includes Gaoxin, our primary raw material supplier, and local down-stream users, which we believe provides us with substantial cost and operational advantages and results in other synergies. All of our manufacturing bases and our main electricity and alumina supplier, Gaoxin, are in close geographic proximity to each other (within 80 km of each other) and are connected by our in-house power supply grid. We are connected to other major production bases of downstream aluminum fabrication products, such as Henan Province, Liaoning Province and Jiangsu Province, and major alumina production bases and coal resources in Shandong Province, Shanxi Province and Henan Province, through developed transportation networks.

We currently have four manufacturing bases, one located in Zouping, one in Weiqiao, one in Binzhou and one in Huimin. Our weighted average production capacity of aluminum products was approximately 738,973 tons, 970,496 tons, 1,507,916 tons and 836,792 tons for the three years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, with utilization rates of approximately 98.3%, 110.9%, 105.7% and 107.3%, respectively, during the respective periods. As of June 30, 2012, we had an annual designed capacity of 1,776,000 tons. We expect our designed production capacity of aluminum products to reach 2 million tons per year by the end of 2012.

#### **Our History**

Our history can be traced back to the establishment of Shandong Hongqiao, a sino-foreign joint venture, by Chuangye Group and an independent third party in 1994. In September 2006 and April 2007, a subsidiary of Shandong Hongqiao, Aluminum & Power, acquired from Chuangye Group certain aluminum production facilities with an aggregate designed annual production capacity of approximately 156,000 tons and 100,000 tons, respectively. By the end of 2009, the aggregate designed weighted average annual production capacity of Shandong Hongqiao and Aluminum & Power increased to approximately 738,973 tons through their construction of new aluminum products manufacturing facilities. On January 4, 2010, Shandong Hongqiao acquired relevant aluminum production facilities with an annual production capacity of 160,000 tons owned by Chuangye Group. In order to streamline and prepare our corporate structure for our IPO, the companies comprising our Group, including Aluminum & Power and Shandong Hongqiao, underwent the Reorganization and, as a result, our Company became the holding company of the Group.

# **Our Products**

Our aluminum products consist of molten aluminum alloy, aluminum alloy ingots, aluminum alloy casting-rolling products and aluminum busbars. We began manufacturing aluminum products in 2006 by using self-manufactured primary aluminum. Our aluminum products are made from alumina and carbon anodes through a smelting process by means of electrolytic reduction. We sold approximately 731,043 tons, 1,064,775 tons, 1,585,810 tons and 895,565 tons of aluminum products for the years ended December 31, 2009 and 2010 and 2011 and the six months ended June 30, 2012, respectively. Molten aluminum alloy is our major product, the sales of which accounted for approximately 61.5%, 84.4%, 74.0% and 65.7% of our revenue derived from aluminum products for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Compared with the production of aluminum alloy ingots, the production of molten aluminum alloy allows us to avoid incurring significant molding and other relevant costs. By purchasing molten aluminum alloy, our customers avoid transportation costs and the cost of smelting or reheating aluminum alloy ingots for further processing, including the related equipment, labor and storage costs. We are able to provide our customers with molten aluminum alloy due to our close

proximity to them, which, we believe, provides us with significant cost and operational advantages and results in other synergies. All of our aluminum alloy ingots are produced with self-manufactured molten aluminum alloy. Aluminum busbars are electrolytic aluminum blocks.

We are also developing advanced aluminum fabrication products production capacity. In 2011, we completed a production line for aluminum alloy casting-rolling and foil products with an aggregate designed annual production capacity of approximately 30,000 tons in our Binzhou manufacturing base. For the six months ended June 30, 2012, we had produced a total of 13,793 tons and sold a total of 6,312 tons of aluminum alloy casting-rolling products. We expect to begin operating another production line in 2014 manufacturing high precision aluminum plate and stripe products.

The following table sets forth the sales volume, revenue, average selling price of, and percentage of our revenue derived from, each type of our products for the periods indicated:

		Year ended December 31,										
		20	)09			2010			2011			
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue
Aluminum products												
Molten aluminum												
alloy	445,614	5,334.5	11,971	61.5%	903,099	12,204.1	13,514	80.7%	1,173,652	16,972.4	14,461	71.8%
Aluminum alloy												
ingot	278,270	3,243.7	11,657	37.5%	157,240	2,183.0	13,883	14.4%	405,347	5,845.6	14,421	24.7%
Aluminum busbar	7,159	90.2	12,609	1.0%	4,436	66.8	15,059	0.4%	6,348	103.0	16,225	0.4%
Aluminum alloy												
casting-rolling												
products			-				-		463	7.4	15,983	0.1%
Subtotal	731,043	8,668.4	11,858	100.0%	1,064,775	14,453.9	13,575	95.5%	1,585,810	22,928.4	14,458	97.0%
Steam	-	-	-	-	5,105,024	677.7	133	4.5%	5,255,568	697.6	133	3.0%
Total		8,668.4		100.0%		15,131.6		100.0%		23,626.0		100.0%

		Six months ended June 30,								
		20	)11			20	)12			
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue		
Aluminum products										
Molten aluminum alloy	585,170	8,448.0	14,437	74.5%	596,269	8,047.5	13,496	63.9%		
Aluminum alloy ingot	175,471	2,506.3	14,283	22.1%	285,887	4,004.1	14,006	31.8%		
Aluminum busbar	2,077	32.8	15,792	0.3%	7,097	107.1	15,091	0.9%		
Aluminum alloy casting-rolling										
products					6,312	92.4	14,635	0.7%		
Subtotal	762,718	10,987.1	14,405	96.9%	895,565	12,251.1	13,680	97.3%		
Steam	2,623,080	348.2	133	3.1%	2,601,466	345.3	133	2.7%		
Total		11,335.3		100.0%		12,596.4		100.0%		

# **Our Performance**

We have achieved significant growth in our sales volume of aluminum products since our inception. We sold approximately 731,043 tons, 1,064,775 tons, 1,585,810 tons and 895,565 tons of aluminum products for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, and generated revenue of approximately RMB8,668.4 million, RMB14,453.9 million, RMB22,928.4 million and RMB12,251.1 million (US\$1,928.4 million) for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012. In response to the global economic downturn, we closely monitored the market and negotiated purchase prices of coal and raw materials according to market conditions, reduced electricity consumption in our production process, strengthened our inventory management and quality control, optimized our manufacturing processes, and solidified our market position by establishing new sales and marketing teams covering Eastern and Southern China.

# **Our Main Cost Items**

Our two main cost items in the production of aluminum are alumina and electricity. These two cost items accounted for approximately 36.4% and 37.1% of our total cost of sales, respectively, in 2010, approximately 36.8% and 36.7%, respectively, in 2011, and approximately 35.7% and 36.4%, respectively, for the six months ended June 30, 2012.

We benefit from arrangements in relation to the key inputs into our aluminum products. Primarily, these include (i) cost advantages from the production of a significant amount of the electricity that we use for the production of our aluminum products at our thermal power stations, (ii) our in-house power grid connecting our four manufacturing bases, (iii) cost advantages from purchasing off-grid electricity from Gaoxin, (iv) pricing discounts resulting from our bulk purchases of alumina from our principal supplier of alumina, Gaoxin and (v) cost advantages from the production of a portion of the alumina we use in our manufacturing in-house. In 2010, 2011 and for the six months ended June 30, 2012, we produced 55.1%, 44.0% and 55.1%, respectively, of the electricity we used in our production of aluminum products at our thermal power stations. We produced this electricity at a cost below the purchase price of electricity that we purchase externally. The remainder of our electricity requirements were purchased from Gaoxin pursuant to a direct power supply agreement and delivered via our in-house power grid. Our purchases of electricity from Gaoxin accounted for approximately 66.5%, 88.8% and 89.2% of its total electricity output for 2010 and 2011 and the six months ended June 30, 2012, respectively. Due to our off-grid structure and bulk purchases, we have been able to purchase our electricity from Gaoxin at a price below average on-grid electricity price. Moreover, we purchased approximately 47.8%, 58.8% and 50.9% of the total volume of alumina sold by Gaoxin for 2010 and 2011 and the six months ended June 30, 2012, respectively. Due to the significant volume of alumina that we purchase from Gaoxin and Gaoxin's close proximity to our operations, we believe that we have been able to negotiate price discounts with respect to such alumina

purchases. Gaoxin is an independent third party, in which the Labor Union Committee of Shandong Zouping Economic Development Zone holds substantially all of the beneficial interest. It had an aggregated designed annual production capacity of 4.0 million tons of alumina as of June 30, 2012. In 2012, we constructed facility to produce alumina in-house. During the six months ended June 30, 2012, we produced approximate 26.3% of the alumina supply for our manufacturing from our self-owned facility and we believe that we enjoy cost savings from producing our alumina in-house.

## Alumina

Alumina is one of the principal components of our cost of goods sold, accounting for approximately 30.7%, 36.4%, 36.8% and 35.7% of our total cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Our aggregate alumina purchase costs amounted to approximately RMB2,382.3 million, RMB3,421.0 million, RMB5,689.6 million and RMB3,045.9 million (US\$479.4 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, and the average price we paid was approximately RMB1,712 per ton, RMB1,621 per ton, RMB1,874 per ton and RMB1,844 (US\$290.3) per ton, respectively, during the respective periods. According to Antaike, the average spot price of alumina (not including taxes) in China was approximately RMB2,000 per ton, RMB2,350 per ton, RMB2,308 per ton and RMB2,252 (US\$354.5) per ton for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

We procured alumina exclusively from Chuangye Group for 2009, and we procured alumina exclusively from Gaoxin from January 2010 to March 2011. We started to acquire alumina from a third party, in addition to Gaoxin, from April 2011. During the first six months of 2012, we constructed facilities to make use of coal fly ash, including an in-house alumina production facility with an aggregate annual production capacity of up to 2,000,000 tons of alumina. The alumina we produced at our new in-house production facility accounted for approximately 26.3% of the total alumina we used during the six months ended June 30, 2012 and is expected to satisfy at least 45% of our total alumina needs for the six months ending December 31, 2012. Nonetheless, we expect to continue to rely on continued procurement of alumina from Gaoxin for the foreseeable future.

We are currently exploring overseas joint venture opportunities to develop bauxite and alumina production capabilities to supplement our domestic raw material supplies, which opportunities may or may not materialize in the near future.

# Electricity

Electricity is also one of the principal cost components in manufacturing our aluminum products. Electricity accounted for approximately 49.8%, 37.1%, 36.7% and 36.4% of our cost of sales for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Our electricity cost was approximately RMB3,870.9 million, RMB3,483.0 million, RMB5,674.5 million and RMB3,102.4 million (US\$488.3 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, and the average purchase price we paid was approximately RMB0.442 per kWh, RMB0.291 per kWh, RMB0.291 per kWh and RMB0.291 (US\$0.046) per kWh, respectively, during the same periods. During the three years ended December 31, 2011 and the six months ended June 30, 2012, we purchased electricity from Gaoxin and Chuangye Group. To further secure a stable electricity supply, our own thermal power stations started to supply electricity to us in January 2007. As of June 30, 2012, our power station had an aggregate installed capacity of 2,070 MW. We produced electricity at an average cost of RMB0.227 per kWh for the six months ended June 30, 2012. The volume of electricity supplied by our own thermal power stations accounted for approximately 30.1%, 55.1%, 44.0% and 55.1% of the volume of our total electricity consumption for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. In addition, we started to sell steam produced by our thermal power stations to Gaoxin in 2010. For 2010 and 2011 and the six months ended June 30, 2012, the revenue from the sale of steam was approximately RMB677.7 million, RMB697.6 million and RMB345.3 million (US\$54.3 million), accounting for approximately 4.5%, 3.0% and 2.7% of our revenue of continuing operations during the same periods.

The following table sets forth our average purchase price of alumina and average purchase price of electricity, and the market prices or benchmark prices of alumina and electricity in China for the periods indicated:

	Year e	nded December	Six months end	led June 30,	
	2009	2010	2011	2011	2012
			(RMB)		
Alumina					
Our average purchase price					
(per ton)	1,712	$1,621^{(1)}$	$1,874^{(2)}$	1,797	1,844
Average spot market price of					
alumina in China (per ton)	2,000	2,350	2,308	2,332	2,252
Electricity					
Our average electricity purchase					
price (per kWh) <sup>(3)</sup>	$0.442^{(4)}$	0.291	0.291	0.291	0.291
Benchmark price of Shandong					
Province <sup>(5)</sup> (per kWh)	0.318	0.318	0.361	0.344	0.361

(1) Gaoxin was our sole alumina supplier from January 2010 to March 2011.

(3) Our Directors have confirmed that the price of electricity supplied to us by Gaoxin was determined through arm's length negotiation between Gaoxin and us.

- (4) The average electricity prices for 2009 also include the amortization of construction cost of the power grid by Gaoxin, which has been fully amortized. Our Directors have confirmed that it is a market norm for the customers to bear the construction cost of power grids in the off-the-grid electricity market.
- (5) The benchmark price of Shandong Province is set by the Shandong Provincial Government and it refers to the base price at which the electricity suppliers are able to sell electricity to the state-owned grid. The actual price of the electricity sold to the state-owned grid is subject to further adjustment to the benchmark price, which takes into account factors such as the technology utilized, the quality of coal, the size of the supplier's operations and other factors.

# **Our Customers**

We sell all of our aluminum products to domestic customers, who are located mainly in Shandong Province as well as in other regions of China, such as in Northeastern, Southern, Eastern and Northern China. Our customers include downstream aluminum fabrication product manufacturers, who process our aluminum alloy products into aluminum fabrication products, such as aluminum plates, aluminum wire and wheel hubs, and traders, who in turn resell our aluminum products to downstream aluminum fabrication product manufacturers or other traders. Certain of our customers are domestic premium aluminum fabrication product manufacturers and well known traders. As of June 30, 2012, all of our molten aluminum alloy customers were located within 30 kilometers from us. Approximately 63.9% of our revenue for the six months ended June 30, 2012 was derived from the sales of molten aluminum alloy.

Our largest customer accounted for approximately 20.0%, 40.8%, 33.5% and 30.0% of our revenue of continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. This single largest customer is one of the major aluminum product manufacturers in China and we have had a relationship with this customer for approximately six years. This customer has not in the past five years indicated any dissatisfaction with any of our products or services. We believe that we have maintained a good relationship with this customer.

<sup>(2)</sup> In January 2011, we received feedback from four major alumina suppliers, two in Shandong Province, one in Beijing and one in Henan Province, which were willing to provide us with certain price discounts. However, as these suppliers are not as close to our production bases as Gaoxin, our Directors believe the price discounts provided by these suppliers would be smaller than that provided by Gaoxin. In addition, we entered into an alumina purchase agreement with an independent alumina supplier based in Qingdao, pursuant to which it will provide us with a total volume of 250,000 tons of alumina from April 2011 to December 2012. The first delivery was made in April 2011.

Our five largest customers, all of which were independent third parties of our Group, accounted for approximately 58.0%, 73.7%, 65.1% and 57.1% of our revenue of continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. During the three years ended December 31, 2011 and the six months ended June 30, 2012, among our five largest customers, those located in Zouping County are downstream aluminum fabrication product manufacturers, and those located outside of Zouping County are traders. As of June 30, 2012, we had 83 customers. Our relationship histories with our top customers range from one to six years, due to our short operating history.

## **RECENT DEVELOPMENTS**

We are constructing new thermal power station units to expand our electricity production capacity, which we expect to increase to approximately 2,730 MW by the end of 2012. Since 2011, we have added 990 MW of electricity production capacity. As of June 30, 2012, our electricity production capacity was 2,070 MW.

We are developing advanced aluminum fabrication products production capacity at our Binzhou and Zouping manufacturing bases. In 2011, we completed a production line at our Binzhou manufacturing base for aluminum alloy casting-rolling and foil products with an aggregate designed annual production capacity of approximately 30,000 tons. For the six months ended June 30, 2012, we had produced a total of 13,793 tons of aluminum alloy casting-rolling products. In 2011, we also started to build an aluminum product production line at our Zouping manufacturing base with a designed annual production capacity of approximately 760,000 tons. We intend to use this line for the production of high precision aluminum plate and stripe products and other aluminum products. We believe these products to be different from the products of our local downstream customers and therefore do not expect to compete with our existing customers. We expect to begin operating this production line in 2014.

For the period from January 1, 2010 to March 31, 2011, Gaoxin was our sole supplier of alumina. In 2011, we entered into an alumina purchase agreement with an independent alumina supplier based in Qingdao, pursuant to which it agreed to provide us with a total volume of 250,000 tons of alumina from April 2011 to December 2012. For the six months ended June 30, 2012, approximately 74,056 tons of alumina had been delivered under that agreement, accounting for approximately 4.4% of our total alumina consumption for the same period. During the six months ended June 30, 2012, we constructed facilities to make use of coal fly ash, including a self-owned alumina thus production facility with an aggregate annual production capacity of up to 2,000,000 tons of alumina. Alumina thus produced accounted for approximately 26.3% of the total alumina supply for our manufacturing during that period and is expected to satisfy at least 45% of our total alumina from Gaoxin accounted for only approximately 69.3% of the total alumina we used to produce alumina from Gaoxin the six months ended June 30, 2012.

We are currently exploring overseas joint venture opportunities to develop bauxite and alumina production capabilities to supplement our domestic raw material supplies, which opportunities may or may not materialize in the near future.

On April 10, 2012, we issued US\$150,000,000 aggregate principal amount of 6.5% convertible bonds due 2017. See "Description of Other Material Indebtedness – Offshore Financing – The Convertible Bonds." On September 17, 2012, we paid off the Previous J.P. Morgan Facility. We entered into the new J.P. Morgan Facility on September 7, 2012 and we expect to draw down US\$460 million and HK\$320 million on or about September 25, 2012 from the J.P. Morgan Facility. See "Description of Other Material Indebtedness – Offshore Financing – The J.P. Morgan Facility."

In 2011, we submitted to PRC regulators an application for approval to issue corporate bonds in the principal amount of approximately RMB2.6 billion through Shandong Hongqiao. As of the date of this document, we have not yet obtained approval for this proposed issuance. In addition, we are in the process of applying with relevant PRC authorities for approval to issue medium term notes in the principal amount of approximately RMB3.0 billion.

# **Our Competitive Strengths**

*Established market position in the Chinese aluminum industry with sustainable and resilient profitability* We were the fourth-largest aluminum product manufacturer in China in terms of designed annual aluminum production capacity as of June 30, 2012, according to Antaike. We believe we are one of the lowest-cost primary aluminum producers in China and that our competitive cost structure provides us with strong resilience to aluminum price fluctuation as illustrated by our robust profit margin and high historical capacity utilization rates. While three-month average SHFE aluminum prices decreased from RMB16,870 in 2011 to RMB16,112 in the six months ended June 30, 2012, our EBITDA margin only decreased marginally from 38.5% in 2011 to 37.4% in the six months ended June 30, 2012 while the capacity utilization of our aluminum production lines increased from 105.7% to 107.3%.

We currently have four manufacturing bases, one located in Zouping, one in Weiqiao, one in Binzhou and one in Huimin. For the six months ended June 30, 2012, we had an annual weighted average designed production capacity of 1,776,000 tons and a production volume of 898,296 tons, respectively.

We have adopted advanced technologies in our production. For example, a majority of our smelting pots are equipped with advanced high-current technology with a working current intensity ranging from 320 kA to 400 kA, which is more energy efficient compared to smelting pots with lower working current intensities. According to Antaike, only approximately 49.8 per cent. of the total smelting capacity in China operated at a working current intensity of 300 kA or above as of December 31, 2011. We believe that our advanced manufacturing technologies and equipment allow us to produce high-quality aluminum alloy products at competitive production cost.

In addition, we believe that our established market position in terms of scale and technology will enable us to benefit from the PRC government's industry policies which encourage consolidation in the Chinese aluminum industry to create larger, less polluting and more energy-efficient producers. Such policies favor large and technologically-advanced domestic aluminum product manufacturers such as ourselves. In addition, barriers to entry have increased after the NDRC published "Regulation on Entry Conditions" in October 2007, pursuant to which the PRC government introduced more stringent requirements for new aluminum projects in terms of production scale, technology and capital. See "Regulation Overview."

# Vertically integrated business model

We have established vertically integrated operations that cover the entire aluminum industry value chain consisting of:

- large-scale, self-owned thermal power stations with aggregate production capacity of 2,070 MW;
- an in-house alumina manufacturing facility with a designed annual production capacity of 2 million tons of alumina;
- primary aluminum production facilities with an aggregate designed annual production capacity of approximately 1,776,000 tons; and
- downstream aluminum alloy casting-rolling and foil products production facilities with an aggregate designed annual production capacity of approximately 30,000 tons.

From the year ended December 31, 2011 to the six months ended June 30, 2012, our electricity self-sufficiency rate increased from 44.0% to 55.1% and our alumina self-sufficiency rate increased from nil to 26.3%. While our upward integration enabled us to reduce our dependency on suppliers, our expansion into the downstream aluminum product fabrication business further increased our product diversity. Overall, we believe our vertically integrated business model enhances our resilience to industry cyclicality and market risks.

# Competitive cost structure and secure supply of electricity and alumina

Our four manufacturing bases and our main electricity and alumina supplier, Gaoxin, are in close geographic proximity to each other (within 80 km of each other) and are connected by our self-owned power

supply grid. As a result, we enjoy cost advantages and high operational efficiency through centralized procurement of raw materials and electricity. Our competitive cost structure is further enhanced by production of low-cost electricity supplied by our own thermal power stations and the low-cost alumina produced in our in-house facility. For the six months ended June 30, 2012, the unit cost of sales of our aluminum products was approximately RMB9,227 (US\$1,452.4) per ton while the industry average was approximately RMB13,650 per ton according to Antaike. We believe the following cost advantages differentiate us from other competitors in the aluminum industry in China:

#### Large-scale, cost-efficient captive power stations

As of June 30, 2012, the production capacity of our thermal power stations was 2,070 MW, an increase from 1,740 MW as of December 31, 2011. As a result, the percentage of our electricity used that was produced in-house increased from 44.0% in 2011 to 55.1% in the six months ended June 30, 2012. We expect to increase our total installed electricity production capacity to approximately 2,730 MW by the end of 2012. For the six months ended June 30, 2012, our thermal power stations achieved a high capacity utilization rate with annualized average utilization hours of approximately 7,226 hours. In addition, since January 1, 2010, we have sold steam generated by our thermal power stations to Gaoxin for its alumina production at a price of RMB150 per ton (inclusive of VAT). The high capacity utilization rate of our thermal power stations have further reduced our electricity generation costs.

# Off-grid direct power supply

Our four manufacturing bases, self-owned thermal power stations and sole external electricity supplier, Gaoxin, are all in close proximity to each other and are connected by our in-house power supply grid which we built jointly with Gaoxin. This power supply grid enables us to purchase off-grid electricity from Gaoxin and avoid paying wheeling charges to power grid suppliers. We believe our electricity purchase model is economically more favorable than those of our competitors who purchase on-grid or off-grid electricity that requires them to pay wheeling charges to power grid suppliers.

## Alumina supply from adjacently-located supplier

Gaoxin, which had an aggregate designed annual alumina production capacity of 4.0 million tons as of June 30, 2012, is located adjacent to our manufacturing bases. Our close geographic proximity to Gaoxin helps us save packaging and transportation costs which, together with our long term commitment and our large volume purchases, allow us to negotiate price discounts.

# Alumina produced in our in-house facility

During the first six months of 2012, we constructed facilities to make use of coal fly ash, including an in-house alumina production facility with an aggregate annual production capacity of up to 2,000,000 tons of alumina. The alumina we produced at our new self-owned production facility accounted for approximately 26.3% of the total alumina we used during the six months ended June 30, 2012 and is expected to satisfy at least 45% of our total alumina needs for the six months ending December 31, 2012. We believe the production of alumina in our in-house facility will result in cost savings for us.

# Cost savings by focusing on selling molten aluminum alloy

Sales of molten aluminum alloy accounted for approximately 61.5%, 84.4%, 74.0% and 65.7% of our revenue from aluminum products for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Molten aluminum alloy is our main product in terms of sales volume and revenue. By focusing on molten aluminum alloy as compared to aluminum alloy ingots, we avoid incurring significant molding costs and associated electricity, labor, storage and other relevant costs. Furthermore, all of our molten aluminum alloy directly from our smelters to our customers' manufacturing bases. We deliver our molten aluminum alloy and enjoy low transportation costs. By purchasing molten aluminum alloy, our customers minimize transportation costs and save the cost of smelting or reheating aluminum alloy ingots for further processing, including the related equipment, labor and storage costs. As such, our customers and we both benefit from higher margins.

# Strategic location of our production facilities within an end-to-end industrial aluminum production cluster

We are strategically headquartered in Zouping County, Shandong Province, one of the major aluminum product manufacturing bases in China, where our principal supplier, Gaoxin, and a number of downstream aluminum product manufacturers are all in close proximity, forming an end-to-end industrial aluminum production cluster. Our four manufacturing bases are in close proximity to each other. We believe the strategic location of our production facilities, together with our leading market position in the area, gives us a competitive edge in terms of access to customers and raw material suppliers, which in turn results in cost and operational synergies.

Since we are the largest molten aluminum alloy manufacturer in Zouping County, we believe that we have a unique competitive advantage in attracting and retaining local customers in Zouping County. Due to their close proximity to us, our customers minimize transportation costs and costs associated with smelting or reheating aluminum alloy ingots for further processing, including the related equipment, labor and storage costs. In addition, Shandong Province is connected to major production bases of downstream aluminum product companies, such as those located in Henan Province, Liaoning Province and Jiangsu Province, and major alumina production bases and coal resources in Shandong Province, Shanxi Province and Henan Province by highly developed transportation networks, including highway, railway and river systems. As a result, we, together with our local suppliers and customers in the industrial aluminum production cluster has resulted in cost competitiveness in the entire value chain, and we believe that our leading market position in the industrial aluminum production cluster has enhanced our overall competitiveness and the sustainability of our cost advantages.

# Strong balance sheet with conservative credit profile

We generated positive operating cash flows over the three years ended December 31, 2011 and the six months ended June 30, 2012, which have helped us maintain a prudent capital structure and liquidity. Our cash flows from operating activities increased from RMB1,923.6 million in 2009 to RMB5,630.1 million (US\$894.5 million) in 2011. Our cash flows from operating activities was RMB3,524.0 million (US\$554.7 million) for the six months ended June 30, 2012. Our cash and cash equivalents increased from RMB443.1 million as of December 31, 2009 to RMB6,560.2 million (US\$1,032.6 million) as of June 30, 2012.

We have maintained a conservative credit profile. Our last twelve months ("LTM") EBITDA<sup>1, 2</sup> to LTM finance cost<sup>3</sup> ratio was 21.9 for the 12 months ended June 30, 2012. Our total debt<sup>4</sup> to LTM EBITDA ratio was 1.1 for the 12 months ended June 30, 2012.

# Experienced management team with significant industry expertise

We are led by an experienced and stable management team, in particular our executive Director and chief executive officer, Mr. Zhang Bo. Mr. Zhang Bo has more than 13 years of management experience and has been responsible for overseeing our general operations, marketing and promotion in recent years. Our management team has a proven track record of successfully producing and marketing our high-quality aluminum products. For example, with the onset of the global economic downturn in the second half of 2008, the growth rates of aluminum production and consumption in China slowed down in 2008 and 2009,

Notes:

<sup>1.</sup> See "Summary Historical Financial Information" for the definition of EBITDA.

<sup>2.</sup> LTM EBITDA equals to EBITDA for 2011 plus EBITDA for the six months ended June 30, 2012 minus EBITDA for the six months ended June 30, 2011.

<sup>3.</sup> LTM finance cost equals to finance cost for 2011 plus finance cost for the six months ended June 30, 2012 minus finance cost for the six months ended June 30, 2011.

<sup>4.</sup> Total debt is the sum of our total bank borrowings, other borrowings and Convertible Bonds.

and prices of aluminum products experienced dramatic fluctuations. In response, our management team implemented a series of crisis management measures to reduce costs, optimize our production process and strengthen our market position. As a result, while the industry experienced a decrease in production and consumption globally for 2009, we increased the sales volume of our aluminum products by approximately 19.8% to approximately 731,043 tons for 2009 as compared to approximately 610,057 tons for 2008. Under the leadership of our management, the sales volume of our aluminum products continued to increase by 45.7% and 48.9%, to 1,064,775 tons in 2010 and 1,585,810 tons in 2011, respectively, and by 17.4% to 895,565 tons for the six months ended June 30, 2012 from 762,718 tons for the six months ended June 30, 2011. Our Directors believe that our experienced and committed management team is capable of developing and implementing our strategies quickly in response to market changes.

## **Our Strategies**

We seek to further strengthen our established market position in the aluminum industry in China. We aim to achieve sustainable growth of our businesses and remain competitive. To achieve this, we intend to implement the following strategies:

#### Continue to expand production capacity and increase our captive power generation

We intend to continue to increase our share of the aluminum market in China by expanding our production scale. We are in the process of expanding our existing manufacturing bases to increase our production capacity. We plan to increase the aggregate designed annual capacity of our aluminum products production facilities to 2,000,000 tons by the end of 2012. We believe the production expansion will further enhance our overall competitiveness in the aluminum industry in China. In addition, we expect to expand our total installed electricity production capacity from the 2,070 MW as of June 30, 2012 to approximately 2,730 MW by the end of 2012 to further optimize our cost structure and to reduce our reliance on our external electricity supplier.

#### Further improve cost structure and achieve additional cost reductions

We seek to improve our cost structure and achieve additional cost reductions mainly through three approaches: (1) increasing the percentage of electricity generated by our own thermal power stations relative to our total electricity consumption by improving the utilization rate and production efficiency of our own thermal power stations and by expanding our electricity production capacity to further reduce the average production cost of our aluminum products; (2) investing in, improving and upgrading our production facilities, technology and production processes, which will improve our production efficiency and allow us to achieve savings in electricity and raw materials consumption, repair and maintenance expenses and labor cost; and (3) continuing to reduce our raw material costs by leveraging the growing scale of our operations with a view to obtaining volume discounts and by increasing our in-house alumina production capacity.

# Further enhance vertical integration to capture additional cost advantages and further strengthen our competitiveness in the market

We aim to become a leading manufacturer in China of advanced aluminum fabrication products by using our self-manufactured aluminum alloy products. We plan to achieve this goal progressively. We have established ourselves as a leading manufacturer of aluminum products, which we believe provides us with a market reputation, financial strength and technology that will assist us in further expanding into the downstream market for advanced aluminum fabrication products. We are developing our capacity for the production of advanced aluminum fabrication products at our Binzhou and Zouping manufacturing bases. In 2011, we completed a production line at our Binzhou manufacturing base for aluminum alloy casting-rolling and foil products with an aggregate designed annual production capacity of approximately 30,000 tons. As of December 31, 2011 and June 30, 2012, we had produced a total of 2,133 tons and 13,793 tons, respectively, of aluminum alloy casting-rolling products. In 2011, we began building an aluminum product production line in our Zouping manufacturing base with a designed annual production capacity of approximately 760,000 tons. We intend to use this line for the production of high precision aluminum plate and stripe products and other aluminum products. We expect to begin operating this production line in 2014. We believe that, by offering advanced aluminum fabrication products, we will be able to diversify our

product mix and enhance our competitiveness in the market. In addition, as the profit margins of high-end and advanced aluminum fabrication products, such as aluminum casting-rolling products and high precision aluminum plate and stripe products, are generally higher than those of our current aluminum products, we will be able to improve our overall profit margin.

During the first six months of 2012, we constructed facilities to make use of coal fly ash, including for the production of alumina with an aggregate annual production capacity of up to 2,000,000 tons. The alumina thus produced accounted for approximately 26.3% of the total alumina we used during the six months ended June 30, 2012 and is expected to satisfy at least 45% of our total alumina needs for the six months ending December 31, 2012. We expect that the alumina we produce will contribute to a substantial portion of our supply of alumina in the future. We are currently exploring overseas joint venture opportunities to develop bauxite and alumina production capabilities to supplement our domestic raw material supplies, which opportunities may or may not materialize in the near future. We believe that our strengthened vertical integration will help us capture additional cost advantages and further improve our competitiveness in the Chinese aluminum market.

#### Enhance product research and development capabilities

We seek to focus our research and development efforts on improving our manufacturing techniques, improving product quality and reducing costs. We plan to enhance our capabilities by allocating additional resources to our research and development activities, to hire additional research and development staff, including engineers, and to purchase new advanced machinery and equipment. In addition, we plan to broaden our product portfolio and improve our production processes through our continuing research and development activities. We have established a research and development center, and we intend to recruit more research and development personnel to develop new products, such as advanced aluminum fabrication products. We also plan to procure advanced equipment for our laboratory in order to improve our production technology, enhance the quality of our products and reduce production cost. Preparation for the center commenced in April 2010 and it has been operative since the second half of 2011. We plan to develop our automatic and integrated work safety monitoring system. We also plan to develop cooperative relationships with research and academic institutions to diversify our product mix.

# Increase our marketing and sales efforts

We plan to devote more resources to our marketing and sales efforts in order to expand the customer base for our existing products and also to market and sell our new advanced aluminum fabrication products. While strengthening our dominant market position in Zouping County, we also seek to improve our market penetration in other regions in China, especially in Northeastern, Southern, Eastern and Northern China, where the major downstream aluminum processing bases are located. To further strengthen our market position, we plan to expand our sales and distribution network by establishing new sales offices, providing new training programs to our sales and marketing personnel, participating in industry conferences and trade fairs and exhibitions, advertising our products in China and overseas, further developing of our website for sales and marketing personnel. We believe that our reputation as a high-quality aluminum alloy manufacturer will help us attract new customers and retain existing customers for our aluminum products. We believe that the successful execution of this strategy will also help to diversify our customer base.

# **OUR PRODUCTS**

Aluminum products are widely used in various industries, such as construction, electrical, transport and consumer durables. Aluminum is a silvery white and ductile member of the boron group of chemical elements, the third most abundant element in the earth's crust, after oxygen and silicon. Aluminum is the most widely used non-ferrous metal for its corrosion resistance due to the phenomenon of passivation and its low density, low tensile strength, and ease in forming alloys with many chemical elements such as copper, zinc, manganese, silicon, and magnesium, which have significant improvement in mechanical properties.

We organize and manage our operations according to our four principal products: molten aluminum alloy, aluminum alloy ingots, aluminum alloy casting-rolling products and aluminum busbars. Our molten

aluminum alloy and aluminum alloy ingots are labelled as 6063 alloys and 356Z.1 alloys and our aluminum busbars are labelled as Al99.70A aluminum pursuant to the State quality standards promulgated by the PRC government. See "– Quality Control." Because 6063 alloys are thermoplastic, anti-corrosive and easy to process, they are widely used in industrial and residential construction, as well as heat and electricity conduction materials. As 356Z.1 alloys have outstanding physical and mechanical properties and are light and anti-corrosive, they are used in producing wheel hubs of automobiles. Our aluminum busbars are mainly used as parts in aluminum smelting furnaces.

Our revenue generated from aluminum products accounted for 100% for 2009 and approximately 95.5%, 97.0% and 97.3% for 2010, 2011 and the six months ended June 30, 2012 of our revenue derived from our continuing operations, respectively. The following table sets forth the sales volume, revenue, average selling price of, and revenue derived from, each type of our products for the periods indicated:

	Year ended December 31,											
	2009					2010			2011			
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue
Aluminum products												
Molten aluminum												
alloy	445,614	5,334.5	11,971	61.5%	903,099	12,204.1	13,514	80.7%	1,173,652	16,972.4	14,461	71.8%
Aluminum alloy												
ingot	278,270	3,243.7	11,657	37.5%	157,240	2,183.0	13,883	14.4%	405,347	5,845.6	14,421	24.7%
Aluminum busbar.	7,159	90.2	12,609	1.0%	4,436	66.8	15,059	0.4%	6,348	103.0	16,225	0.4%
Aluminum alloy casting-rolling												
products			-				-		463	7.4	15,983	0.1%
Subtotal	731,043	8,668.4	11,858	100.0%	1,064,775	14,453.9	13,575	95.5%	1,585,810	22,928.4	14,458	97.0%
Steam	-	-	-	-	5,105,024	677.7	133	4.5%	5,255,568	697.6	133	3.0%
Total		8,668.4		100.0%		15,131.6		100.0%		23,626.0		100.0%

		Six months ended June 30							
		2	011			2012			
	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	Volume (tons)	Revenue (RMB in millions)	Average selling price (RMB/ton)	Percentage of revenue	
Aluminum products									
Molten aluminum alloy	585,170	8,448.0	14,437	74.5%	596,269	8,047.5	13,496	63.9%	
Aluminum alloy ingot	175,471	2,506.3	14,283	22.1%	285,887	4,004.1	14,006	31.8%	
Aluminum busbar	2,077	32.8	15,792	0.3%	7,097	107.1	15,091	0.9%	
Aluminum alloy casting-rolling									
products					6,312	92.4	14,635	0.7%	
Subtotal	762,718	10,987.1	14,405	96.9%	895,565	12,251.1	13,680	97.3%	
Steam	2,623,080	348.2	133	3.1%	2,601,466	345.3	133	2.7%	
Total		11,335.3		100.0%		12,596.4		100.0%	

# Molten aluminum alloy



Molten aluminum alloy is our main product, and it accounted for approximately 61.5%, 84.4%, 74.0% and 65.7% of our revenue generated from sales of aluminum products for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Molten aluminum alloy is a red and yellow hot liquid, in which aluminum is the predominant metal and combined with iron, copper, zinc, manganese, silicon, magnesium and other chemical elements. Molten aluminum alloy is an important material for fabricating aluminum products. We use self-manufactured electrolytic aluminum to manufacture molten aluminum alloys.

Molten aluminum alloy has to be stored in a specially designed container to keep its temperature at 750°C to 900°C during delivery. Most of our customers for molten aluminum alloy are based in Zouping County and are in close proximity to our manufacturing bases. We engage a third-party delivery service provider to deliver molten aluminum alloy to our customers. See "– Delivery of Products." Our customers then pour the molten aluminum alloy directly into molds to produce various downstream aluminum products.

According to Antaike, approximately 30% to 40% of aluminum manufacturers in the PRC provide their customers with molten aluminum alloy as the intermediate product for further processing into aluminum fabrication products. According to Antaike, as of June 30, 2012 we are one of two molten aluminum alloy suppliers in Zouping County. As the largest aluminum alloy supplier in Zouping County, we accounted for approximately 91.6% of the annual production capacity of primary aluminum in Zouping County as of December 31, 2011, according to Antaike. However, our molten aluminum alloy customers can also use the other local molten aluminum alloy supplier to supply molten aluminum alloy for their operations. In addition, our molten aluminum alloy customers which have in-house smelting and reheating capacity can also use aluminum alloy ingots as a substitute for molten aluminum alloy. However, our Directors believe that our customers in Zouping County generally prefer using molten aluminum alloy due to its various benefits as compared to aluminum alloy ingots.

## Aluminum alloy ingots



Sales of aluminum alloy ingots accounted for approximately 37.5%, 15.1%, 25.5% and 32.7% of our revenue generated from aluminum products for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Molten aluminum alloy is processed into aluminum alloy ingots through molding, casting and cooling. Our aluminum alloy ingots are produced by using self-manufactured molten aluminum alloy.

Aluminum alloy ingots are widely used as raw materials in the production of car wheels, industrial, civil construction, and thermal conductivity materials due to their outstanding physical, mechanical and thermoplastic features, as well as light-weight, corrosion resistance, easy processing and excellent performance. Our aluminum alloy ingots are primarily sold to customers in regions other than Zouping County, such as in other counties in Shandong Province, Beijing, Tianjin, Hebei Province, Jiangsu Province,

Guangdong Province, Liaoning Province and Zhejiang Province. Among these customers, there were 23 traders and 42 downstream aluminum fabrication product manufacturers.

# Aluminum busbars



Aluminum busbars are electrolytic aluminum blocks. We started to produce aluminum busbars in 2006 but the aluminum busbars were only for our own use in 2007 and 2008. We started to sell aluminum busbars in 2009. Sales of aluminum busbars accounted for approximately 1.0%, 0.5%, 0.5% and 0.9% of our revenue generated from our aluminum products for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. All of our aluminum busbars were sold to Chuangye Group for 2009, which it used as parts in the smelting pots of its production line. We acquired that production line from Chuangye Group in 2010.

All of the other aluminum busbars we have manufactured were used for the construction of the production lines in our Binzhou manufacturing base. We do not intend to expand our production of aluminum busbars in the future. Instead, we intend to produce aluminum busbars only for our own use.

# Other aluminum products

We plan to develop our capacity of advanced aluminum fabrication products in our Binzhou and Zouping manufacturing bases. In 2011, we completed a production line in our Binzhou manufacturing base for aluminum alloy casting-rolling and foil products with an aggregate designed annual production capacity of approximately 30,000 tons. For the six months ended June 30, 2012, we had produced a total of 13,793 tons and sold 6,312 tons of aluminum alloy casting-rolling products. In 2011, we began building a production line in our Zouping manufacturing base with a designed annual production capacity of approximately 760,000 tons. We intend to use this line for the production of high precision aluminum plate and stripe products and other aluminum products. We expect to begin operating this production line in 2014.

# **PRODUCTION PROCESS**

Most modern aluminum production facilities adopt the pre-bake reduction process used in aluminum smelting furnaces as it is energy-efficient and environmentally friendly. See "Industry Overview – Overview." Since our inception, we have used pre-bake anode reduction pot-lines to produce molten aluminum. During the production of molten electrolytic aluminum, the waste gases generated are purified and recycled through our purification system to reduce emission of waste gases to acceptable levels as established by environmental protection agencies.

Molten electrolytic aluminum is made from alumina and carbon anodes through a smelting process using electrolytic reduction. High electric currents at low voltage are passed through the smelting pots to produce molten electrolytic aluminum at a temperature of between 950°C and 970°C. The molten electrolytic aluminum is poured into molds to produce aluminum busbars or combined with various chemical elements to form various molten aluminum alloys. Molten aluminum alloys are poured into molds to produce aluminum ingots.

The production process of our major aluminum products is illustrated below:



# **OUR PRODUCTION FACILITIES**

We have obtained approvals from relevant governmental authorities for total annual designed production capacities of approximately 156,000 tons of electrolytic aluminum products and approximately 1,620,000 tons of aluminum fabrication products. Our Zouping, Weiqiao and Binzhou manufacturing bases have designed annual production capacity of approximately 900,000 tons, 636,000 tons and 240,000 tons of aluminum product, respectively, as of June 30, 2012. Our manufacturing bases had aggregate designed annual production capacity of approximately 1,776,000 tons of aluminum products as of June 30, 2012. For the six months ended June 30, 2012, we had a weighted average designed production capacity of 836,792 tons and a production volume of 898,296 tons. In addition, we are in the process of expanding our manufacturing bases to increase our production capacity. To further take advantage of our centralized power supply management and procurement of raw materials and electricity, we intend to build our fourth manufacturing base for aluminum products. Construction of the base has started but a definitive timeline for operation has not been finalized.

Our Group's production capacity of electrolytic aluminum with an aggregate annual designed production capacity of approximately 156,000 tons was approved before the "Further Supporting the Restructuring and Revitalization of Key Industries and Curbing Overcapacity in Some Industries," which prohibits the

construction of new electrolytic aluminum manufacturing facilities and the expansion of existing facilities through Financial Services promulgated by the PRC government on December 22, 2009 came into effect. See "Industry Overview – Competition Landscape" and "Regulation Overview." As advised by our PRC legal advisors, Zong Heng Law Firm, all of our production lines of electrolytic aluminum have been approved by the competent governmental authorities according to the applicable PRC laws at the relevant time. Zong Heng Law Firm has further advised that our Group has duly obtained all material approvals in respect of environmental protection and all land use rights for such production lines, and such project is in compliance with the relevant industry policies and PRC laws and regulations.

Our Weiqiao manufacturing base is located in Weiqiao Town, Zouping County, and commenced its operations in September 2006. Our Zouping manufacturing base is located in the Zouping Development District, Zouping County, and commenced its operations in July 2007. Our Binzhou manufacturing base is located in Binzhou Economic Development Zone, and commenced its trial operation in October 2010. As of June 30, 2012, our three manufacturing bases had an aggregate designed annual production capacity of approximately 1,776,000 tons of aluminum products. All of our manufacturing facilities are located in Zouping County or Binzhou Economic Development Zone, in China's Shandong Province. Our principal equipment includes 240 kA smelting pots, 320 kA smelting pots and 400 kA smelting pots, holding furnaces, casting machines and continuous casting and rolling lines.

We acquired from Chuangye Group aluminum production lines with an aggregate designed annual aluminum production capacity of approximately 156,000 tons for approximately RMB839.2 million in September 2006, which is located at our Weiqiao manufacturing base, aluminum production lines with an aggregate designed annual aluminum production capacity of approximately 100,000 tons for approximately RMB499.9 million in April 2007, which is located at our Weiqiao manufacturing base, and aluminum production lines with an aggregate designed annual aluminum production capacity of approximately 160,000 tons for approximately RMB1,189.7 million in January 2010, which is located at our Zouping manufacturing base. The production lines we acquired in January 2010 are equipped with smelting pots for a working current intensity of 320 kA and 400 kA and produce molten aluminum alloy and aluminum alloy ingots.

We planned to develop our capacity for advanced aluminum fabrication products, such as aluminum foil, aluminum alloy casting-rolling plate, high precision aluminum plate and stripe products, at our Binzhou manufacturing base by using self-manufactured aluminum alloy products when we consider the market condition favorable to us.

	Year e	ended December	Six months ended June 30,		
	2009	2010	2011	2011	2012
Weighted average production					
capacity (tons)	738,973 <sup>(1)</sup>	970,496 <sup>(1)</sup>	1,507,916 <sup>(1)</sup>	735,013 <sup>(1)</sup>	836,792(1)
Production volume (tons)	726,192	1,076,196	1,594,193	766,019	898,296
Utilization rate <sup>(2)</sup>	98.3%	110.9%	105.7%	104.2%	107.3%

The following table sets forth information relating to our weighted average production capacity for the three years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012 and our production volumes and utilization rates for the same periods:

(1) The weighted average production capacity for each period is the result of (i) the total sum of the designed annual production capacity of each of our production lines multiplied by the months in that period that such production line possessed such capacity (ii) divided by 12 for each of the three years ended December 31, 2011 and six months ended June 30, 2011 and 2012.

(2) Utilization rate is calculated by dividing the production volume for the relevant period by the weighted average designed annual production capacity as of the end of the relevant year.

We are in the process of expanding our manufacturing bases to increase our production capacity. For the six months ended June 30, 2012, our capital expenditure on the property, plant and equipment for the expansion of our manufacturing bases and our thermal power stations was approximately RMB5,577.5 million (US\$877.9 million) and the relevant capital commitment was approximately RMB11,146.5 million (US\$1,754.5 million), respectively. We expect to fund the capital expenditures for the expansion of our manufacturing bases by cash generated from our operating activities and the proceeds from any fund raising activities. We will arrange for our equipment suppliers to provide us with necessary technological support and training.

Our PRC legal advisors, Zong Heng Law Firm, have advised us that we have obtained the necessary approvals and permits and completed all material filings for our existing production facilities and production facilities under construction.

# PROCUREMENT

We procure raw materials and energy, including electricity and coal, from external suppliers. Our five largest suppliers together accounted for approximately 73.3%, 69.3%, 69.3% and 59.0%, respectively, of our total procurement for 2009, 2010 and 2011 and the six months ended June 30, 2012. Chuangye Group was our largest supplier for 2009, accounting for approximately 46.3% of our total procurement in 2009. We purchased alumina and electricity from Gaoxin exclusively for 2010 and the first quarter of 2011. Gaoxin was our largest supplier for 2010 and 2011 and the six months ended June 30, 2012, accounting for approximately 58.4%, 61.6% and 51.5%, respectively of our total procurement during that periods.

Gaoxin is a joint stock company incorporated in Zouping County, Shandong Province under the laws of the PRC on January 24, 2007, which is 98.0% owned by Shandong Zouping Yunda Investment Management Company Limited and 2.0% owned by Shandong Zouping Kaida Real Estate Company Limited. The shareholders of Shandong Zouping Yunda Investment Management Company are the Labor Union Committee of Shandong Zouping Economic Development Zone, Shandong Zouping Kaida Real Estate Company, which hold approximately 74.6%, 10.4% and 15.0% respectively of the equity interest in Shandong Zouping Yunda Investment Management Company Limited. The members of the management committee of the Labor Union Committee are the principal officials of the Shandong Zouping Economic Development Zouping Economic Development Zone, so the management committee of the Labor Union Raide Real Estate Investment Management Company Limited. The members of the management committee of the Labor Union Committee are the principal officials of the Shandong Zouping Economic Development Zouping Economic Development Zouping Economic Development Zouping Couping Economic Development Company Interest in Shandong Zouping Yunda Investment Management Company Limited. The members of the management committee of the Labor Union Committee are the principal officials of the Shandong Zouping Economic Development Zone. As confirmed by Gaoxin, none of its senior management member or its sole director holds any position in the PRC government.

As advised by Gaoxin, we purchased approximately 58.8% and 50.9% of total volume of alumina sold by Gaoxin for 2011 and the six months ended June 30, 2012, and we were Gaoxin's largest customer for the same periods. As advised by Gaoxin, after the acquisition of the alumina business, Gaoxin's alumina business was profitable for 2010. In addition, as advised by Gaoxin, it had an aggregate designed annual production capacity of approximately 4.0 million tons of alumina. Gaoxin indicated that its current alumina pricing arrangement with our Group is commercially sustainable for its business. However, if there is any material adverse change in Gaoxin's business, financial condition and results of operations, or it is unwilling or unable to provide us with high-quality alumina and electricity in required quantities and at commercially acceptable prices, or if it enters into bankruptcy proceedings, our business, financial condition and results of operations would be material adverse change in Gaoxin's business, financial adversely affected. See "Risk Factors – Risks Relating to Our Business – If there is any material adverse change in Gaoxin's business, financial condition and results of operations, our business, financial condition and results of operations would be materially and adversely affected."

According to Gaoxin, it currently has 7 bauxite suppliers in Indonesia and India. In December 2009, Chuangye Group sold its alumina production facilities to Gaoxin for approximately RMB3.1 billion.

Since the establishment of Gaoxin, there has been no management or director overlap between Gaoxin and us, or between Gaoxin and Chuangye Group. There was no overlap of employees between Chuangye Group and us before the disposal of the alumina production business to Gaoxin, and there has been no overlap of employees between Gaoxin and us after such disposal.

As confirmed by the Labor Union Committee, while it has over 300 members, its decision-making is vested in Shandong Zouping Economic Development Zone Management Committee, or the Management Committee. The Management Committee is a governmental body established by the People's Government of Zouping County and is in charge of the daily administration of the Zouping Economic Development Zone. The members of the Management Committee are not otherwise involved in the operations of the People's Governments of Binzhou City or Zouping County. Our production department usually provides our procurement department with a monthly raw materials requirement schedule for its production need for the next month. In accordance with our production requirements and inventory policy, our procurement department will arrange the selection of suppliers and procurement of raw materials.

# **Raw Materials**

Our procurement department is responsible for the assessment and selection of suppliers and procurement of raw materials. The principal raw materials which we use in production include alumina and carbon anodes. The following table illustrates the total purchase amount, purchase volume and percentage of each raw material for the periods indicated:

		Year ended December 31,									
	2009				2010			2011			
	Amount (RMB in thousands)	Volume (tons)	Percentage of total amount	Amount (RMB in thousands)	Volume (tons)	Percentage of total amount	Amount (RMB in thousands)	Volume (tons)	Percentage of total amount		
Alumina	2,382,343	1,391,506	73.4%	3,421,009	2,110,817	64.7%	5,689,584	3,035,570	66.6%		
Carbon anodes	769,039	372,361	23.7%	1,581,165	499,980	29.9%	2,503,984	768,635	29.3%		
Others <sup>(1)</sup>	92,801		2.9%	284,394		5.4%	344,673		4.1%		
Total	3,244,183	_	100.0%	5,286,568	_	100.0%	8,538,241	_	100.0%		

		Six months ended June 30,							
		2012		2011					
	Amount (RMB in thousands)	Volume (tons)	Percentage of total amount	Amount (RMB in thousands)	Volume (tons)	Percentage of total amount			
Alumina	3,045,895	1,703,748	71.0%	2,662,352	1,481,742	64.6%			
Carbon anodes	1,114,580	397,531	26.0%	1,275,754	381,797	30.9%			
Others <sup>(1)</sup>	129,602		3.0%	183,976		4.5%			
	4,290,077	_	100.0%	4,122,082	_	100.0%			

(1) Others include fluorides, metals used in producing aluminum alloy, slag removal flux, refining flux, sodium carbonate, magnesium fluoride and other materials.

# Procurement of alumina

Alumina is one of the principal components of our cost of goods sold, accounting for approximately 73.4%, 64.7%, 66.6% and 71.0% of our total purchase of raw materials for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Most of our suppliers are raw materials manufacturers, while the others are raw materials traders. All of our suppliers are located in China. For 2009, Chuangye Group was our largest supplier of raw materials and our sole supplier of alumina. Gaoxin was our largest supplier and sole alumina supplier for 2010 and the first quarter of 2011. We started to acquire alumina from another supplier based in Qingdao in 2011. We also recently began to produce alumina in 2012. Our aggregate alumina purchase costs amounted to approximately RMB2,382.3 million, RMB3,421.0 million, RMB5,689.6 million and RMB3,045.9 million (US\$479.4 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, and the average cost we incurred was approximately RMB1,712 per ton, RMB1,621 per ton, RMB1,874 per ton and RMB1,788 (US\$281.4) per ton, respectively, during the same periods. According to Antaike, the average spot price of alumina (not including taxes) in China was approximately RMB2,000 per ton, RMB2,350 per ton, RMB2,308 per ton and RMB2,252 (US\$354.5) per ton for 2009, 2010 and 2011 and the six months ended June 30, 2010 and 2011 and the six months ended June 30, 2010 and 2011 and the six months ended June 30, 2010 and 2011 and the six approximately RMB2,000 per ton, RMB2,350 per ton, RMB2,308 per ton and RMB2,252 (US\$354.5) per ton for 2009, 2010 and 2011 and the six months ended June 30, 2010 and 2011 and the six months ended June 30, 2012, respectively.

### Alumina procurement from Chuangye Group

We procured alumina exclusively from Chuangye Group for 2009. In May 2006, we entered into the Agency Agreement with Chuangye Group, pursuant to which we procured alumina from Chuangye Group at production cost. This agreement expired on December 31, 2009. We purchased alumina from Chuangye Group for an aggregate amount of approximately RMB2,382.3 million for 2009, and the average purchase price was approximately RMB1,712 per ton during the same period. According to Antaike, the average spot price of alumina (not including taxes) in China was approximately RMB2,000 per ton for 2009. Our Directors confirm that our cost of alumina was generally in line with the prevailing market prices, taking into account the facts that our alumina purchase orders were for long term and of large quantity. We were Chuangye Group's largest customer of its alumina products for 2009. See "– Discontinued Operations."

#### Alumina procurement from Gaoxin

In December 2009, Chuangye Group sold its alumina production facilities to Gaoxin. As confirmed by Chuangye Group, it sold its alumina production facilities to focus on its textile business, and Gaoxin had financial capability to purchase the alumina production facilities at that time. As advised by Gaoxin, it acquired the alumina production facilities with the intent to leverage its own electricity generating capacity. We entered into an alumina supply agreement with Gaoxin on December 25, 2009, which was separately supplemented on December 27, 2009, January 6, 2010 and October 20, 2011, which extended the term of the agreement to December 31, 2015. Our Directors have confirmed that the terms of this alumina supply arrangement are based on arm's length negotiation. Pursuant to the alumina supply agreement, we and Gaoxin agreed to determine the base price of alumina provided to our Group with reference to the sales price of alumina supplied by Gaoxin to other independent third parties in early January of the relevant year. In addition, Gaoxin agreed to provide us with price discounts, and the price of alumina provided to us by Gaoxin is equal to the price of alumina offered to other third parties by Gaoxin minus an amount reflecting the following factors:

- our long-term commitment;
- that our purchase volume is more than one million tons each year, which materially reduces Gaoxin's unit cost of alumina production;
- that we pick up the alumina in bulk by ourselves, which materially reduces the packaging and distribution costs of Gaoxin; and
- that we maintain a deposit of RMB400 million, which provides Gaoxin with extra liquidity.

Such price discounts are determined through negotiation between Gaoxin and us from time to time, and are subject to our actual purchase volume and the supply and demand dynamics in the alumina and aluminum industries. Our Directors believe that if we fail to meet the conditions of the price discount stipulated in the alumina supply agreement, we may have to re-negotiate the pricing terms with Gaoxin. In addition, if the fluctuation of alumina market price reaches or exceeds 10% of the base price of the current year, and if such fluctuation remains for no less than two months, the alumina price under the framework agreement will be adjusted accordingly. Within one month immediately prior to the expiration of the alumina supply agreement, if Gaoxin and we decide not to extend the alumina supply agreement upon expiration, we may choose to offset the RMB400 million deposit against the alumina purchase price. In case there is remaining deposit after the offset, we are entitled to offset the deposit by any amount we owe Gaoxin. Moreover, if there is still remaining deposit after the offset of the amount we owe Gaoxin, Gaoxin has undertaken to repay the balance of the deposit to us within 14 days upon our written request. Our Directors believe that payment of such deposit is in line with common industry practice and we will be able to recover such deposit upon the expiration or termination of this alumina supply agreement. Our PRC legal advisors, Zong Heng Law Firm, have further advised us that the supply of alumina by Gaoxin to our Group complies with applicable PRC laws and regulations as supply of alumina is within Gaoxin's business scope. As at June 30, 2012, Zong Heng Law Firm is not aware of any proposed material change in the PRC laws and regulations governing alumina production.

For 2010 and 2011 and the six months ended June 30, 2012, we purchased alumina with an aggregate amount of approximately RMB3,421.0 million, RMB5,490.3 million and RMB2,168.3 million (US\$341.3 million) from Gaoxin with an average purchase price of approximately RMB1,621 per ton, RMB1,870 per ton and RMB1,836 (US\$289.0) per ton, respectively. According to Antaike, the average spot price of alumina (not including taxes) was approximately RMB2,350 per ton, RMB2,308 per ton and RMB2,252 (US\$354.5) per ton during the same periods. In addition, Gaoxin has also provided alumina to our Binzhou manufacturing base since its trial production in late September 2010. We usually make full payments before we pick up alumina from Gaoxin. We usually make prepayments in several instalments to Gaoxin every month and Gaoxin settles the purchase price of alumina with us by issuing invoices to us at the end of every month based on our actual purchase amount. The amount of each such prepayment is determined based on the estimated amount of alumina to be consumed during the period covered by such prepayment. For 2010 and 2011 and the six months ended June 30, 2012, we were Gaoxin's largest customer for its alumina products. Our Directors have confirmed that, during the three years ended December 31, 2011 and the six months ended June 30, 2012, we have not experienced any interruption of the supply of alumina from the suppliers.

Our purchase of alumina as a percentage of total purchase of raw materials for 2009, 2010 and 2011 and the six months ended June 30, 2012 was approximately 73.4%, 64.7%, 66.6% and 71.0%, respectively, and was approximately 27.5%, 23.7%, 24.8% and 24.2% as a percentage of total revenue of aluminum products during the same periods. Purchase of alumina accounted for 30.7%, 36.4%, 36.8% and 35.7% of the cost of sales of our products for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. However, as the pricing mechanisms of alumina provided by Chuangye Group and Gaoxin are different, our historical raw materials cost and product cost structure may not be indicative of our raw materials cost and product cost structure in the future. As a result, investors may have difficulties in evaluating our business and prospects because our historical performance may not be indicative of our business, financial condition and results of operations in the future.

The following table sets forth our average purchase price of alumina from Chuangye Group for 2009, and from Gaoxin for 2010, 2011 and the six months ended June 30, 2012, and the average spot market price of alumina in China, according to Antaike, for the periods indicated:

	Year e	ended December	Six months ended June 30,			
	2009	2010	2011	2011	2012 (RMB)	
	(RMB)	(RMB)	(RMB)	(RMB)		
Chuangye Group	1,712	_	_	_	_	
Gaoxin	_	1,621	1,870	1,795	1,836	
Average spot market price of						
alumina (not including taxes) in						
China	2,000	2,350	2,308	2,332	2,252	

We procured alumina exclusively from Chuangye Group for 2009, and we procured alumina exclusively from Gaoxin from January 2010 to March 2011. According to Antaike, bauxite prices rebounded slightly since 2010 but remained relatively low. As a result of and based on our negotiation with Gaoxin, our purchase price of alumina provided by Gaoxin decreased to RMB1,621 per ton, RMB1,870 per ton and RMB1,836 (US\$289.0) per ton for 2010 and 2011 and the six months ended June 30, 2012, respectively. Due to our arrangements with Chuangye Group and Gaoxin described above, our average purchase prices of alumina from Chuangye Group and Gaoxin were lower than the average spot market prices of alumina in China during the three years ended December 31, 2011 and the six months ended June 30, 2012. If we had purchased alumina at the average spot market prices in China during the three years ended December 31, 2011 and the six months ended June 30, 2012. If we had purchased alumina at the average spot market prices in China during the three years ended December 31, 2011 and the six months ended June 30, 2012, and assuming all other factors, including change in inventories, remain unchanged, our total purchase costs of alumina would have increased by approximately RMB400.7 million, RMB1,538.8 million, RMB1,285.8 million and RMB491.4 million (US\$77.3 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

Our Directors believe that we are able to source alumina from alternative suppliers domestically or overseas in a timely manner in case Gaoxin is not able to provide our Group with alumina in sufficient quantities or at all. However, the price of such alumina supplied by third party suppliers (other than Gaoxin) may be significantly higher than that of the alumina supplied to us by Gaoxin. In January 2011, we received feedback from four major alumina suppliers, two in Shandong Province, one in Beijing and one in Henan Province. These alumina suppliers were willing to supply alumina to us. These potential alternative suppliers had a total annual capacity to produce or supply approximately 9 million tons of alumina, and they indicated that they were able to provide approximately 250,000 tons of alumina to us every month, which our Directors believe should be adequate to meet our demand. In addition, they were also willing to provide us with certain price discounts because we are a reputable aluminum manufacturer in China and have a large demand for alumina. However, as these suppliers are not as close to our production bases as Gaoxin, our Directors believe the price discounts provided by these suppliers would be smaller than that provided by Gaoxin. In addition, these commitments are not legally binding, and we are not able to guarantee you that these suppliers will fully honor their commitments in the future. We are not able to assure you that we will be able to find alternative sources of alumina at the same price level offered by Gaoxin or at otherwise commercially acceptable prices or terms in a timely manner, or at all. If we fail to do so, it would have a material adverse effect on our business, financial condition and results of operations.

#### Alumina procurement from other suppliers

For the period from January 1, 2010 to March 31, 2011, Gaoxin had been our sole supplier of alumina. In 2011, we entered into an alumina purchase agreement with an independent alumina supplier based in Qingdao, pursuant to which it agreed to provide us with a total volume of 250,000 tons of alumina from April 2011 to December 2012. The first delivery was made in April 2011 and approximately 174,059 tons had been delivered under that agreement from April 2011 through June 30, 2012.

#### Procurement of other raw materials

Our raw materials other than alumina and carbon anodes are generally procured through competitive bidding among our suppliers. We organize regular on-site biddings and online biddings for our raw materials suppliers. For carbon anodes, we negotiate the terms and conditions of the supply agreements with our suppliers. When we select suppliers, we not only take into account the bidding price, but also carefully consider the candidate's credit history, the quality of the raw materials and feedback from our production department.

We have entered into long-term framework supply agreements with some of our suppliers to secure a stable supply of raw materials. Such long-term framework agreements usually have a term of three years. Pursuant to these supply agreements, our suppliers provide us with certain volumes of raw materials on a monthly basis. We have also entered into individual supply agreements with our suppliers based on bidding results. For the supply of carbon anodes and fluorides, the suppliers are responsible for delivery of the raw materials to our warehouse and the relevant expenses. We have the right to terminate the supply agreement if the quality is not satisfactory. We usually require the supply agreements. For the long-term framework supply agreements, the price is determined by reference to the market price. For the individual supply agreements, the price is determined through the bidding process. We received quality deposits that amounted to RMB79.7 million, RMB138.4 million, RMB650.3 million and RMB764.4 million (US\$120.3 million) as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively, including quality deposits made by raw material suppliers and quality deposits made by equipment suppliers.

We have entered into a long-term carbon anodes supply agreement with Aluminum Technology, which is wholly owned by Chuangye Group. The carbon anodes we purchased from Aluminum Technology amounted to approximately RMB162.8 million, RMB309.9 million, RMB333.7 million and RMB102.3 million (US\$16.1 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

For carbon anodes, fluorides and other raw materials, we usually make payments after we check the quality of such raw materials and formally accept the delivery. We usually have a credit period of up to 60 days for these raw materials.

# ELECTRICITY SUPPLY

Electricity is one of the principal cost components in our production. Smelting aluminum requires a substantial and continuous supply of electricity. Our electricity cost was approximately RMB3,870.9 million, RMB3,483.0 million, RMB5,674.5 million and RMB3,102.4 million (US\$488.3 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, accounting for approximately 49.8%, 37.1%, 36.7% and 36.4% of our cost of sales during the same periods. As a result, the availability and cost of electricity are key considerations in our production. To further secure a stable electricity supply, we commenced the construction of our own thermal power stations in 2005, which started to supply electricity to us in January 2007. The power station is located next to our Zouping manufacturing base, and the electricity generated is off the grid and is exclusively supplied to our operations. Generating electricity with our own power station costs less than purchasing electricity from external suppliers during the three years ended December 31, 2011 and the six months ended June 30, 2012. We have recently begun the construction of three new thermal power station units to expand our electricity production capacity, which we expect to increase to approximately 2,730 MW by the end of 2012. The volume of electricity supplied by our own thermal power stations accounted for approximately 30.1%, 55.1%, 44.0% and 55.1% of the volume of our total electricity consumption for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

The following table sets forth the volume of electricity purchased from external suppliers and the volume of electricity internally supplied by our thermal power stations for the periods indicated:

	Ye	ear ended December (	31,	Six months ended June 30,
	2009	2010	2011	2012
	(kWh)	(kWh)	(kWh)	(kWh)
External	7,263,594,077	6,458,281,102	12,081,888,076	5,506,044,037
Internal	3,134,830,375	7,935,136,537	9,503,914,037	6,745,960,460
Total	10,398,424,452	14,393,417,639	21,585,802,113	12,252,004,497

# Electricity suppliers

During the three years ended December 31, 2011 and the six months ended June 30, 2012, we purchased electricity from two local electricity suppliers, Chuangye Group and Gaoxin. Gaoxin became our exclusive electricity provider in January 2010. The following table sets forth the amount of electricity we purchased from suppliers for the periods indicated:

	Year	ended December 31,		Six months ended June 30,				
	2009	2010	2011	2012				
	(RMB)	(RMB)	(RMB)	(RMB)				
	(in millions)							
Chuangye Group	1,280.8	_	_	-				
Gaoxin	1,929.8	1,875.9	3,511.0	1,600.0				
Total	3,210.6	1,875.9	3,511.0	1,600.0				

We entered into a long-term electricity supply agreement with Chuangye Group in June 2006, which had a term of four years and was terminated on December 31, 2009 by us. Pursuant to this agreement, the base price was RMB0.45 per kWh (inclusive of VAT, which equals to RMB0.38 per kWh exclusive of VAT) and subject to adjustment by reference to market price movements. We purchased electricity from Chuangye Group for an aggregate amount of approximately RMB1,280.8 million for 2009.
We entered into an electricity supply agreement with Gaoxin in June 2008, and Gaoxin started to supply off-the-grid electricity to us in July 2008. In China, as off-the-grid electricity does not use the state-owned grid system for transmission, the price of off-the-grid electricity does not include the grid transmission fee, and as a result, is lower than that of on-the-grid electricity. As of June 30, 2012, Gaoxin had an installed capacity of 1,880 MW. Pursuant to this electricity supply agreement, the base price is RMB0.34 per kWh (inclusive of VAT, which equals to RMB0.29 per kWh exclusive of VAT), assuming that the base price of coal with a heat value of 5,000 kilocalories per kilogram is at RMB700 per ton (inclusive of VAT, which equals to approximately RMB598 per ton exclusive of VAT), which is subject to adjustment through negotiation if the price fluctuation of coal exceeds 20%. This electricity supply agreement does not have a definite term and it will remain effective unless it is terminated by a 90-day prior written notice provided by any party. Pursuant to this electricity supply agreement, Gaoxin built a power grid to connect our facilities to the generators. The construction cost was reimbursed by us and was amortized and included in the electricity price that we actually paid to Gaoxin from June 2008 to December 2009, which was fully settled as of December 31, 2009. We have recognized such construction cost as part of the electricity purchase price in our cost of sales in 2009. Our Directors have confirmed that it is a market norm for the customers to bear the construction cost of power grids in the off-the-grid electricity market.

We purchased electricity from Gaoxin for an aggregate amount of approximately RMB1,929.8 million, RMB1,875.9 million, RMB3,511.0 million and RMB1,600.0 million (US\$251.9 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, accounting for approximately 49.9%, 53.9%, 61.9% and 51.6% of our total electricity cost for the same periods, respectively. We usually make full payment before we receive electricity and alumina from Gaoxin. We make prepayments in several instalments to Gaoxin every month and Gaoxin settles the purchase price of electricity with us by issuing invoices to us at the end of every month based on our actual purchase amount. The amount of each such prepayment is determined based on the estimated amount of electricity to be consumed and the purchase volume of alumina during the period covered by such prepayment. During the three years ended December 31, 2011 and the six months ended June 30, 2012, we sometimes made such prepayments to Gaoxin by endorsed bank bills. On June 20, 2008, we entered into an agreement with Gaoxin, pursuant to which we agreed to be responsible for the finance costs incurred by Gaoxin in relation to discounting such endorsed bank bills. This agreement expired on December 31, 2009. Gaoxin also supplies electricity to companies in chemical and other industries and residents in the region where it carries out its business in Zouping County. Our PRC legal advisors, Zong Heng Law Firm, have advised us that the supply of electricity by Gaoxin to our Group complies with the applicable PRC laws and regulations as Gaoxin is permitted by relevant PRC governmental authorities to generate and supply electricity. As advised by Gaoxin, as of June 30, 2012, we were its largest electricity customer for the six months ended June 30, 2012.

Gaoxin is in the process of expanding its installed capacity. As a result, our Directors believe that Gaoxin is able to provide us with a stable, sufficient and low-cost supply of electricity in the long run. Our Directors have confirmed that, during the three years ended December 31, 2011 and the six months ended June 30, 2012, we did not experience any interruption in the supply of electricity from our suppliers.

However, we do not have any existing alternative electricity supply arrangement (other than our own captive electricity generation). For the six months ended June 30, 2012, our own power station was able to produce approximately 55.1% of our total consumption of electricity. In addition, our Directors believe we can procure off-the-grid or on-the-grid electricity from third party suppliers, although such electricity may be more expensive than the electricity supplied to us by Gaoxin. In particular, on June 29, 2010, we entered into a memorandum of understanding with Zouping Electricity, a state-owned power grid, pursuant to which Zouping Electricity agreed to supply electricity to us at a volume as we may require upon a 14-day prior written notice from us. The price of the electricity will be based on the then on-the-grid electricity price as stipulated by the government, which may be higher than the price of the electricity supplied to us by Gaoxin. However, it is impracticable to estimate the increased costs of electricity as such alternative supplies will only be obtained on a contingent basis and the terms and conditions for such alternatives will depend on factors, including, among other things, the amount of electricity required, and therefore cannot be accurately ascertained until (and if) such contingencies materialize. As agreed by Zouping Electricity

and us, this memorandum of understanding is not legally binding. We cannot assure you that Zouping Electricity will fully honor its obligations under this memorandum of understanding. If we are unable to find alternative sources of electricity at commercially acceptable prices or terms in a timely manner, or at all, it would have a material adverse effect on our business, financial condition and results of operations.

The following table sets forth our average electricity purchase price per kWh and the benchmark price of electricity sold by electricity suppliers to the state-owned grid in Shandong Province for the periods indicated:

	Year	ended December	Six months ended June 30,			
	2009	2010	2011	2011	2012	
	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)	(RMB/kWh)	
Average electricity purchase price	0.442 <sup>(1)</sup>	0.291 <sup>(2)</sup>	0.291	0.291	0.291	
Benchmark price <sup>(3)</sup>	0.318	0.318	0.361	0.344	0.361	

(1) The average electricity price for 2009 also includes the amortization of construction cost of the power grid by Gaoxin.

Our Directors have confirmed that the price of electricity supplied to us by Gaoxin was determined through arm's length negotiation between Gaoxin and us.

## Our thermal power stations

#### Power generation

Our existing thermal power stations are designed by Central Southern China Electric Power Design Institute, which is one of the major electric design institutes in China. Our power station was developed in two phases, each of which has four sets of electricity generators. The construction of phase one commenced in October 2005. Phase one started to supply electricity to our operations in January 2007. The construction of phase two commenced in September 2006 and the last set of generators of phase two started to supply electricity to our operation have also provided electricity to our Binzhou manufacturing base since October 2010. As of June 30, 2012, our thermal power stations had an installed generation capacity of 2,070 MW. We are also in the process of further expanding our thermal power stations. We plan to expand our electricity generation capacity to approximately 2,730 MW by the end of 2012 to further optimize our cost structure and to reduce our reliance on the external electricity suppliers.

Theoretically, the maximum utilization hours of a power station is 8,760, the number of hours in a year. The utilization rate of a power station refers to the amount of the average utilization hours in a year divided by 8,760 hours. The average utilization hours of our Group were approximately 4,009 hours, 7,846 hours, 7,469 hours and 7,226 hours for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively, and the utilization rate was approximately 45.8%, 89.6%, 85.3% and 82.5% during the same periods.

The cost of electricity generated in-house was approximately RMB917.4 million, RMB1,591.3 million, RMB2,161.0 million and RMB1,534.3 million (US\$241.5 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. The electricity cost per kWh was approximately RMB0.29, RMB0.20, RMB0.23 and RMB0.23 (US\$0.036) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

<sup>(2)</sup> Our average purchase price of electricity for 2010 was lower than that of 2009 and was primarily due to the fact that the construction cost for the power grid connecting our facilities to Gaoxin's generators was fully amortized by the end of 2009, and that the price of the electricity purchased by us from Gaoxin for 2010 was lower than the price of electricity purchased by us from Chuangye Group for 2009.

<sup>(3)</sup> The benchmark price is set by the PRC government and refers to the base price at which the electricity suppliers are able to sell electricity to the state-owned grid. The actual price of the electricity sold to the state-owned grid is subject to further adjustment to the benchmark price, which takes into account factors such as the technology utilized, the quality of coal, the size of the supplier's operations and other factors.

#### Heat supply

Our power station also produces heat in the form of steam, which is a byproduct of power generation. As part of the agency arrangement pursuant to the Agency Agreement, which expired on December 31, 2009, we supplied steam to Chuangye Group for its alumina production free of charge. For 2009 we provided approximately 2,104,252 tons of steam to Chuangye Group. See "- Discontinued Operations - Alumina Agency Business." We started to provide steam to Gaoxin for its alumina production from January 1, 2010 at a price of RMB150 per ton (inclusive of VAT, which equals to approximately RMB132.7 per ton exclusive of VAT). This price was determined with reference to the local market price at the time when we entered into the steam supply agreement with Gaoxin, as well as a discount of RMB50 to RMB70 per ton of steam. Our Directors have confirmed that we provide such price discount to Gaoxin because (i) Gaoxin is in close proximity to our power station, which saves our transportation cost; (ii) the existing steam transportation system saves us additional construction cost; and (iii) steam is a byproduct of electricity generation and by selling steam, we can improve the utilization rate of our power generation facilities and reduce our electricity generation cost. For 2010 and 2011 and the six months ended June 30, 2012, we supplied approximately 5,105,024 tons, 5,255,568 tons and 2,601,466 tons of steam to Gaoxin for approximately RMB677.7 million, RMB697.6 million and RMB345.3 million (US\$54.3 million), accounting for approximately 4.5%, 3.0% and 2.7%, respectively, of our revenue of continuing operations during the same periods.

#### Coal procurement

Our thermal power stations use coal as fuel to heat water. We purchase meagre lean coal for power generation, which usually has an average calorific value of 4,800 kilocalories to 5,300 kilocalories per kilogram and a sulfur-bearing rate below 2.5%.

We purchase coal from a number of coal suppliers near Shandong Province. Our coal procurement personnel are based in Shanxi Province, Hebei Province and Inner Mongolia, and they carry out market research with respect to the production, price, transportation cost and inventory level of coal in their respective regions and report such information to our headquarters. In particular, when there is any actual or potential dramatic coal price change in the market, our coal procurement personnel will collect and send to our headquarters relevant market information and our headquarters will adjust our inventory level of coal to address the price risk. We have not entered into any long-term coal supply agreements with our coal suppliers. We have implemented a competitive bidding system among our coal suppliers to ensure our coal supply is of low cost and high quality. We send our bidding invitation in the middle of every month, which specifies the time and location of the bidding and the quantity and quality of the coal. The bidding is usually held at 2:00 pm on the 16th of every month and takes three rounds. When we select coal suppliers, we not only take into account the bidding price, but also carefully consider the candidate's credit history and ability to supply coal at satisfactory quality on time. We usually pay the purchase price to a coal supplier when the coal supplied by such supplier reaches certain minimum amount. Historically, generally we have been able to purchase sufficient coal in the open market to meet our requirements. However, in 2009, we purchased coal with a total price of approximately RMB442.1 million from Chuangye Group, which was priced at the then prevailing market prices of coal and accounted for approximately 50.9% of the amount of coal purchased by us for 2009. We purchased coal with a total amount of approximately RMB869.1 million, RMB1,943.8 million, RMB2,467.3 million and RMB1,552.0 million (US\$244.3 million) for 2009, 2010 and 2011 and for the six months ended June 30, 2012, respectively, including the coal used in the generation of electricity and steam. The purchase cost of coal accounted for approximately 11.2%, 20.7%, 16.0% and 18.2% of our total cost of sales for 2009, 2010 and 2011 and for the six months ended June 30, 2012, respectively.

The following table sets forth our average coal consumption cost and the average price of mix-quality coal quoted by Qinhuangdao Shanxi quality index:

	Year	ended Decembe	Six months ended June 30,			
	2009	2010	2011	2011	2012 (RMB/ton)	
	(RMB/ton)	(RMB/ton)	(RMB/ton)	(RMB/ton)		
Average coal consumption cost <sup>(1)</sup> Average price of mix-quality coal quoted by Qinhuangdao Shanxi	500	587	647	632	627	
quality index <sup>(2)</sup>	600	746	823	703	777	

#### Source: Antaike

- (1) Our Group's average coal consumption cost is inclusive of transportation cost in China.
- (2) According to Antaike, the Qinhuangdao coal price is the most frequently quoted benchmark price in the coal markets in Shandong Province and other regions in China, and is inclusive of transportation cost of coal transported to Qinhuangdao port, which is the largest coal shipping port in the world.

#### SALES AND MARKETING

#### Sales and marketing team

We sell our products through our own sales and marketing team. As of June 30, 2012, we employed 18 sales and marketing personnel.

The head office of our sales and marketing team is located in our manufacturing bases in Zouping County, Shandong Province. The head office is in charge of the overall management of our sales and marketing activities, including market research and development, customer relations, implementation of our sales plan and supervision of our branch offices. As our production schedule is based on sales, the head office also closely works with our production department to ensure timely production and delivery of our aluminum products.

We have also established six sales and marketing teams covering Northeastern, Southern, Eastern and Northern China, where our customers are located. Our sales and marketing teams are responsible for the sales and marketing activities in their own regions. They are responsible for identifying business and market opportunities, engaging in business networking, strengthening relationships with our existing customers while cultivating relationships with potential customers, formulating monthly sales plans and collecting receivables from our customers.

#### Sales and marketing

Our sales and marketing team directly sells products to our customers. We usually approach our customers by visiting their offices or calling them. We are currently not a member of any futures exchanges. During the three years ended December 31, 2011 and the six months ended June 30, 2012, we have not participated in any futures transactions.

We sell our aluminum products to customers in Northeastern, Southern, Eastern and Northern China. Molten aluminum alloy is our most popular product. Most of our molten aluminum alloy and all of our aluminum busbars customers are located in Zouping County and are in close proximity to our manufacturing bases. Our aluminum alloy ingots are primarily sold to customers in regions other than Zouping County.

With the onset of the global economic downturn in the second half of 2008, some of the key end-user sectors for the aluminum industry, such as construction, electrical, transport and consumer durables, suffered a sharp contraction of demand globally. As a result, China's growth rate of aluminum production and consumption slowed down and the price of aluminum products experienced dramatic fluctuations in 2008

and 2009. In response, we closely monitored the market and negotiated purchase prices of coal and other raw materials accordingly, reduced electricity consumption in our production process, strengthened our inventory management and quality control, optimized our manufacturing processes, and solidified our market position by establishing new sales and marketing teams covering Eastern and Southern China. See "Financial Information – Description of the Major Components of Our Results of Operations – Continuing operations – Cost of sales."

## Sales contract terms

We usually enter into framework sales agreements with our customers, which provide for terms of quality, pricing, settlement, payment and planned monthly or annual sales volume. Our customers generally provide us with purchase orders on a monthly basis. The actual monthly volume delivered is negotiated between our customers and us by taking into account the order volume and our capacity for the corresponding month. There is usually no minimum purchase amount required in our framework sales agreements. A sales framework agreement usually has a term between one year to three years. We also enter into individual sales contracts with our customers.

The quality of our products is subject to the national quality standards issued by the PRC government. See "– Quality Control." We are generally responsible for the delivery of our products to customers, except that aluminum busbars are picked up by our customers. In addition, our sales contracts generally provide that, once the products leave our manufacturing site, the ownership of such products are immediately transferred to our customers. As a result, we are not responsible for the risk of losses occurring during transportation. Moreover, if there is any dispute over product quality, the customer must raise such issue within three days after receipt of the relevant products. We did not experience any product return during the three years ended December 31, 2011 and the six months ended June 30, 2012. For products sold in China other than Guangdong Province, the price is determined with reference to the mean price provided by the Yangtze River Non-ferrous Metals Spot Market, and for products sold in Guangdong Province, the price is based on the mean price provided by Nanchu Non-ferrous Metals Spot Market in Guangdong Province, while a premium or discount may be applied from time to time. We usually require our customers to make full payments before delivery. Our customers may choose to pay us by cash or endorsed bank bills.

For our molten aluminum alloy products, our customers usually make prepayments to us on a weekly basis by reference to the average price of our molten aluminum products in the preceding week. However, due to the fluctuation in the price of the molten aluminum alloy, such prepayments may be less than the total price of the molten aluminum alloy delivered by us. For aluminum alloy ingots, our customers usually make prepayments by reference to the then prevailing market price. However, consistent with the general industry practice, for any delivery which may take several days or longer, the actual price is often determined by reference to the price of the delivery date rather than the prepayment date, and there may be price differences between the price of the total price of the aluminum alloy ingots delivered by us. As a result, we will have trade receivables. We generally collect such balance within 90 days. The total trade receivables relating to our continuing operations amounted to approximately RMB44.4 million, RMB3.7 million, RMB1.4 million and RMB12.1 million (US\$1.9 million) as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively, accounting for approximately 0.5%, 0.02%, 0.01% and 0.10% of the total sales of our continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012.

## **OUR CUSTOMERS**

We sell all of our aluminum products to domestic customers, who are located mainly in Shandong Province as well as in other regions of China, such as in Northeastern, Southern, Eastern and Northern China. Our five largest customers accounted for approximately 58.0%, 73.7%, 65.1% and 57.1% of our revenue of continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Certain of our customers are domestic premium aluminum fabrication product manufacturers and well known traders. Our largest customer accounted for approximately 20.0%, 40.8%, 33.5% and 30.0% of our revenue of continuing operations for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. This single largest customer is one of the major aluminum product manufacturers in China and

we have had a relationship with this customer for approximately five years. This customer has not in the past five years indicated any dissatisfaction with any of our products or services. We believe that we have maintained a good relationship with this customer. Our relationship histories with our top customers range from one to six years, due to our short operating history. Sales volume of our aluminum products was approximately 731,043 tons, 1,064,775 tons, 1,585,810 tons and 895,565 tons for 2009, 2010, 2011 and the six months ended June 30, 2012, respectively.

During the three years ended December 31, 2011 and the six months ended June 30, 2012, our customers included downstream manufacturers, who processed our aluminum alloy products into aluminum fabrication products, such as aluminum plates, aluminum wire and wheel hubs, and traders, who in turn resold our products to downstream aluminum fabrication product manufacturers or other traders. There is no difference in pricing strategy towards these two groups of customers. During the three years ended December 31, 2011 and the six months ended June 30, 2012, our five largest customers were located in Zouping County and Guangdong Province. During the three years ended December 31, 2011 and the six months ended June 30, 2012, among our five largest customers, those located in Zouping County are downstream fabrication aluminum product manufacturers, and those located outside of Zouping County are traders. As of June 30, 2012, we had 83 customers.

As most of our molten aluminum alloy customers are located in Zouping County, there is a high geographic concentration of our customers. Our revenue of molten aluminum alloy accounted for approximately 61.5%, 84.4%, 74.0% and 65.7% of our revenue of aluminum products for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. As of June 30, 2012, we had 17 molten aluminum alloy customers, 65 aluminum alloy ingot customers and one casting products customer which are located in Shandong Province, Beijing, Tianjin, Hebei Province, Jiangsu Province, Guangdong Province, Liaoning Province and Zhejiang Province. Among these customers, there were 23 traders and 42 downstream aluminum fabrication product manufacturers.

Our Directors believe that we are not dependent on any particular customer. Since our products are commodities that are readily tradable in the market, if a customer fails to perform its obligations under a sales agreement with us, we believe that we can find a substitute customer in the market.

## **INVENTORY CONTROL**

We had inventories, exclusive of those held for sale, of approximately RMB548.4 million, RMB1,122.1 million, RMB1,908.6 million and RMB2,309.6 million (US\$363.5 million) as of December 31, 2009, 2010, 2011 and June 30, 2012, respectively. Our production and inventory plans are prepared based on our sales. We enter into sales contracts with customers based on our actual production capacity, and our sales and marketing team prepares the production plans and delivers the production plans to our production department, which arranges our inventory accordingly. We usually keep in stock enough raw materials for 15 days' production requirement to ensure our continuous operations. We also keep in stock enough coal for 15 days' power generation requirement, while from November to February, we usually keep enough coal for one month's requirement. We monitor and control our inventory levels of raw materials, work-inprogress and finished products to optimize our operations. We use an enterprise resource planning, or the ERP, system to ensure an efficient and effective management of our inventories. This ERP system keeps record of our inventories so that we have ready access to inventory levels and movement. We have management procedures that monitor the planning and allocation of warehouse space and inventory of raw materials and finished products to meet the delivery requirements and schedules. We also carry out daily inventory counts on our finished products to ensure that our records are up-to-date and there is no loss of inventory.

Since most of our inventories, including alumina, aluminum products and coal, are commodities which are readily tradable in the market and have a short production cycle, we generally do not have any obsolete inventories. Because molten aluminum alloy is produced pursuant to the purchase orders of our customers, which are all located in close proximity to our manufacturing bases, we are able to deliver the molten aluminum alloy directly from our smelters to our customers manufacturing sites immediately after the molten aluminum alloy is manufactured, which allows us to maintain close to zero inventory of molten aluminum alloy. Our entire inventory is insured against fire and natural disasters. Our average turnover days

of inventory, exclusive of those held for sale, were 30, 32, 36 and 45 days for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. See "Financial Information – Inventories, Trade Receivables and Trade Payables."

# QUALITY CONTROL

We believe that the quality of our products is crucial to our continued growth. We place strong emphasis on maintaining consistent quality in our products and services with involvement and commitment from all levels of our management and staff.

The PRC government has issued a series of mandatory national quality standards for aluminum products under various labels. The standards for our aluminum alloy products are set out in the documents GB/T 3190 - 2008, GB/T 8733 - 2007 and GB/T 1196 - 2002 published by the PRC government, which prescribe the national standards in relation to the different chemical components of aluminum alloys. Our aluminum alloy products are labelled as 6063 and 356Z.1 pursuant to these standards.

The following table sets forth the components of 6063 aluminum alloy under GB/T 3190 - 2008:

	Chemical components											
										Ot	her	
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Zr	Individual	Aggregate	Al
6063	0.2-0.6	0.35	0.10	0.10	0.45-0.9	0.10	-	0.10	-	- 0.05	0.15	Remaining

The following table sets forth the components of 356Z.1 aluminum alloy under GB/T 8733 - 2007:

	Chemical components											
				Other								
	Si	Fe	Cu	Mn	Mg	Be	Zn	Sn	Pb	Individual	Aggregate	Al
356Z.1	6.5-7.5	0.45	0.2	0.35	0.3-0.5	0.10	0.2	0.01	0.05	0.05	0.15	Remaining

The standards for our aluminum busbars are set out in the document GB/T 1196 - 2002 published by the PRC government, which prescribes the national standards in relation to various areas including: (1) quality of primary aluminum; (2) sample test required to be conducted to examine the purity of primary aluminum; and (3) labelling, packaging, transportation and storage. The quality of primary aluminum is graded into seven levels based on the amount of impurities contained. Our aluminum busbars are graded Al99.70A, which means the impurities contained in our aluminum busbars are no more than 0.3%.

We emphasize quality in our manufacturing processes. To closely monitor our manufacturing processes, we have established a quality control department. As of June 30, 2012, we had 644 quality control personnel. For inspection purposes, we use equipment, such as spectrographs and atomic absorption spectrometers, to analyze the chemical elements of our products. Furthermore, we have prepared a set of manuals and documents on standard production procedures and our employees are required to follow them to ensure the product quality. In order to meet the high quality standards of our customers, our quality control procedures are carried out at various stages of the manufacturing processes, including incoming, in-process and outgoing stages. In addition, we carry out regular quality control training sessions for our employees to promote quality control technologies as well as quality control awareness. Shandong Hongqiao obtained the ISO 9001 certification for our manufacturing facilities in April 2010. Due to our extensive and stringent quality control system, we did not have any sales returns during the three years ended December 31, 2011 and the six months ended June 30, 2012.

## **RESEARCH AND DEVELOPMENT**

Our research and development activities are led by Mr. Deng Wenqiang, who is responsible for the production, research and development of aluminum products of our Group. Our research and development activities focus on reduction of electricity consumption in our production, optimization of our processing technologies and improvement of product quality. We seek to enhance our capabilities by placing additional resources to our research and development team by way of recruitment of additional research and

development staff, including engineers, and purchase of additional advanced machinery and equipment. We are in the process of developing our research and development center, and we intend to recruit more research and development personnel to develop new products, such as advanced aluminum fabrication products, to procure advanced equipment for our laboratory to improve our production technology, enhance product quality and reduce production cost. Preparation for the center commenced in April 2010 and it has been operative since the second half of 2011. We plan to develop our automatic and integrated work safety monitoring system. We also plan to develop cooperative relationships with research and academic institutions to diversify our product mix.

#### **DELIVERY OF PRODUCTS**

We usually arrange for the delivery of the majority of our products to customers. We rely on third party logistics service providers to deliver our products.

We generally use trucks and ships to deliver aluminum alloy ingots. Once we enter into a sales agreement with a customer, a delivery order will be sent to our logistics subdivision under the sales and marketing department, which will in turn send a bidding invitation to third party logistics service providers. The successful bidder will arrange the delivery in accordance with our customer's requirement after entering into a service agreement and making a deposit with us. We will settle the transportation fee upon the presentation of our customer's receipt and the service provider's invoice. The logistics service providers for aluminum alloy ingots are generally responsible for losses of and damages to our products incurred during delivery pursuant to the relevant service agreements.

Molten aluminum alloy has to be stored in a specially designed container to keep its temperature at 750°C to 900°C during delivery. All of our molten aluminum alloy customers are located in close proximity to our manufacturing facilities. We have engaged Binzhou Yinhe, as our exclusive service provider for the delivery of molten aluminum alloy. We chose Binzhou Yinhe as our exclusive molten aluminum alloy delivery service provider through a competitive bidding among four logistics service providers in June 2007, as Binzhou Yinhe demonstrated their expertise in transportation of hazardous goods and strong financial condition and offered us the lowest price among the bidders. The current service agreement between Binzhou Yinhe and us will expire in September 2012 and we plan to renew it. Pursuant to this agreement, Binzhou Yinhe is our exclusive molten aluminum alloy delivery service provider during the term of this agreement. Upon the expiration of this agreement, we plan to select our molten aluminum alloy delivery service provider through bidding process, and we may choose to engage more than one molten aluminum delivery service provider in the future if we consider it favorable to our Group. According to the service agreement between Binzhou Yinhe and us, Binzhou Yinhe has a priority over other molten aluminum alloy delivery service providers to enter into a new agreement with us. The delivery service fee is calculated by taking into account the transportation volume and average gasoline price on a monthly basis and settled by the end of each month. Binzhou Yinhe is certified to transport dangerous goods. The vehicles that it uses to deliver molten aluminum alloy are properly equipped and have all necessary licenses for such purpose and are equipped with caution lights. In addition, all such vehicles are equipped with GPS satellite computerized navigation systems, which allow us to monitor the delivery process and ensure safe transportation. The transport route is designated by the local traffic authority and, when possible, a special lane for molten aluminum alloy transport will also be assigned. We are able to deliver molten aluminum alloy directly from our smelters to our customers' manufacturing lines within a short period of time. Binzhou Yinhe is responsible for losses of and damages to our products attributable to Binzhou Yinhe's fault. Our Directors have confirmed that, during the three years ended December 31, 2011 and the six months ended June 30, 2012, we did not experience any interruption of the supply of molten aluminum alloy delivery services from Binzhou Yinhe. We do not have any alternative arrangement for molten aluminum alloy delivery services. However, because there are alternative delivery service providers in Zouping County, our Directors believe we will be able to obtain alternative services in case Binzhou Yinhe is unable to provide sufficient and satisfactory molten aluminum alloy delivery services to us. However, we cannot assure you that we will always be able to find alternative sources of molten aluminum alloy delivery services on satisfactory terms in a timely manner, or at all. If we fail to do so, it would have a material adverse effect on our business, financial condition and results of operations. Our customers pick up aluminum busbars from us.

## INTELLECTUAL PROPERTY RIGHTS

We place emphasis on protecting the intellectual property rights of our products, processes and technologies. As of June 30, 2012, 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.

As of June 30, 2012, we owned the domain names **www.hongqiaochina.com**, **www.hongqiaochina.com**, **www.hongqiaogroup.cn** and **www.hongqiaoxc.com**. As of June 30, 2012, we also had seven registered trademarks in Hong Kong, two registered trademarks in the PRC and one trademark application in the PRC for our aluminum products.

Our Directors have confirmed that we had not experienced any infringement of our intellectual property rights which had a material effect on our business as of June 30, 2012.

## **COMPETITION**

The aluminum industry is highly competitive in China. As of June 30, 2012, according to Antaike, there were 100 primary aluminum manufacturers in China, and the average designed annual aluminum production capacity of these manufacturers was 256,000 tons of primary aluminum products, including pure aluminum products and aluminum alloy products. As of June 30, 2012, only 14 primary aluminum manufacturers in China had a designed annual primary aluminum production capacity of 500,000 tons or more, which accounted for approximately 72.0% of the total primary aluminum production capacity in China.

Molten aluminum alloy is our most popular product in terms of sales volume and revenue. As molten aluminum alloy is a hazardous material for transportation and needs to be stored in a specially designed container to maintain a high temperature during delivery, purchasers of molten aluminum alloy are always located in close proximity to the manufacturing facilities of molten aluminum alloy. As the major aluminum supplier in Zouping County, we accounted for approximately 91.6% of the annual production capacity of primary aluminum in Zouping County as of December 31, 2011, according to Antaike. As such, our Directors believe that we have a dominant market position in Zouping County.

We sell aluminum alloy ingots, aluminum alloy casting-rolling products and aluminum busbars to customers located in Northeastern, Southern, Eastern and Northern China. We generally compete with our competitors on quality of products, pricing, location of manufacturing site, time-to-market and available capacity.

Our Directors believe that our competitive advantages and strengths, including our established market position, our ability to take advantage of the fast growing PRC aluminum market, our competitive cost structure and secure supply of electricity, our strategic location, our product focus on molten aluminum alloy and our experienced management team, allow us to compete effectively in the aluminum industry.

## **ENVIRONMENTAL PROTECTION**

We are subject to PRC national environmental laws and regulations and periodic inspection by local environmental protection authorities, including but not limited to the Environmental Protection Law of the PRC (中華人民共和國環境保護法), 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 for Construction Projects (建設項目環境保護管理條例), the Law of the PRC on the Prevention and Control of the Air Pollution (中 華人民共和國大氣污染防治法), the Law of the PRC on the Prevention and Control of the Water Pollution (中華人民共和國水污染防治法) and the Administrative Regulation on the Levy and Use of Discharge Fees (排污費徵收使用管理條例). We are required to conduct assessments on the effect on the environment for the construction of our production lines and power station, formulate environmental pollution prevention and remedial plans and obtain approval from the environmental protection authorities for such assessments before the commencement of construction of our production lines and power station. After the completion of construction, we need to pass inspections for our environmental protection facilities by the environmental protection authorities. We are required to apply for registration with relevant environmental protection authorities for discharge of pollutants and pollutant discharge permits, and pay for overdischarge. Based on the confirmations issued by relevant authorities, we have complied with relevant national and local environmental protection laws and regulations.

#### Aluminum production

According to relevant PRC environmental laws and regulations, the construction, renovation and expansion of all aluminum-processing projects 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.

Also, production activities may not begin until the 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 construction and implement measures to rectify the non-compliance. In circumstances where such rectification measures are not completed and/or production activities have begun prior to inspection and approval, the responsible entity may be fined between RMB50,000 and RMB200,000.

Aluminum production is subject to various environmental laws and regulations. For example, 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 the amount of discharge up to a specified level set by the state or local regulatory authorities. For any discharge exceeding the specified level, the relevant PRC government may order our facilities to rectify behavior causing environmental damage, and subject to PRC government approval, the local government has the authority to order any of our facilities to close for failure to comply with existing regulations.

During the manufacturing process of aluminum products, our factory discharges sewage, emits air pollutants and produces noise. We have installed dedusting equipment for our manufacturing facilities to minimize industrial waste. In addition, we recycle and reuse aluminum scraps generated during our production process. We have improved our energy-efficiency by applying new production techniques and new technologies and optimizing our production process. In addition, we have installed sound insulation equipment to reduce the impact of the noise produced in the daily operations of our manufacturing bases.

## Thermal power stations

During the power generation process, a power station discharges sewage, emits air pollutants, such as sulphur dioxide, and produces noise. We have installed dedusting and desulphurization equipment in our power station to reduce the emission of air pollutants. We have also installed water recycling and treatment equipment to minimize the impact of sewage on the environment. Our power station has obtained the required approvals from and has satisfied the emission requirements provided by local governments. In addition, we have installed sound insulation equipment to reduce the impact of the noise produced in the daily operations of our power station.

## Our environmental protection measures

We have established a dedicated environmental protection department. The environmental protection department is responsible for overseeing the environmental protection of our Group as a whole, such as formulating environmental-related guidelines and policies for our Group in order to ensure compliance with the applicable environmental laws, regulations and standards, monitoring the latest development in the environmental protection guidelines and polices of our Group is up-to-date, monitoring the compliance with the applicable environmental laws, regulations and standards by regularly inspecting the production facilities and the pollutant discharge facilities of our Group, handling the application for environmental protection and any other necessary filings for the construction projects of our Group, liaising with the governmental environmental-related emergency and handling such emergency.

As of June 30, 2012, our environmental protection department which was established in August 2007 comprised of nine environmental protection personnel, all of whom obtained vocational training college education and majored in environmental science, environmental engineering or environmental inspection and treatment. Mr. Ji Dengpan, who has been the head of our environmental protection department since its establishment, has about eight years of experience in environmental protection, and our environmental protection. In addition to these environmental protection personnel, as of June 30, 2012, we also had more than 1,229 production personnel who were responsible for the operations, monitoring and maintenance of our environmental protection facilities.

Shandong Hongqiao obtained the ISO14001 for our environmental management system in April 2010, which set out a wide range of environmental protection requirements, such as the knowledge of environmental protection among our employees, the pollution control and monitoring standards, the pollutant disposal guidelines and the pollution prevention and remedial system. We paid discharge fees of approximately RMB4.8 million, RMB2.0 million, RMB0.6 million and RMB0.3 million (US\$0.05 million) for 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

Our Group has obtained the confirmation letters dated March 19, 2012 issued by the Zouping County Environmental Protection Bureau for Aluminum & Power and Shandong Hongqiao and a confirmation letter dated March 19, 2012 for Zhengtong issued by the Economic Development Zone Branch Office of Binzhou City Environmental Protection Bureau, which confirmed that:

- (i) the construction and operations of all of our projects are in compliance with the environmental protection laws and regulations;
- (ii) our pollutant discharge meets the relevant discharge standards provided by the national and local authorities; and
- (iii) we have complied with relevant environmental protection laws and regulations in the PRC and have never been punished for breach of any of the relevant environmental protection laws, regulations or rules.

Our PRC legal advisors, Zong Heng Law Firm, have further advised us that the Zouping County Environmental Protection Bureau and the Economic Development Zone Branch Office of Binzhou City Environmental Protection Bureau are the competent authorities to issue such confirmations.

The production process of alumina creates solid waste called "red mud." Red mud poses certain health and environmental risks for us. See "Risk Factors – Risks Relating to Our Business – We face risks from our compliance, and Gaoxin's compliance, with environmental protection and workplace safety laws and regulations and safety risks from our operations and Gaoxin's operations."

## WORK SAFETY

We are subject to PRC safety laws and regulations, which set out the legal standards for health and safety measures with which our operations must comply. As our business expands and our production operations become more complex, we regularly review and ensure that our occupational health and safety procedures and measures are in compliance with all relevant legal standards. We are required to conduct assessments on the safety of our aluminum production lines and power station, formulate production safety and accident prevention plans and obtain approval from the work safety authorities for such assessments before the commencement of construction of our aluminum production lines and power station. After the completion of construction, we need to pass inspections for our work safety facilities by the work safety authorities. We are required to provide our employees with work safety education and training, as well as work safety equipment that meet the national and local standards. We are required to educate and supervise our employees to strictly follow our work safety rules and procedures. Based on the confirmations issued by relevant authorities, we have complied with relevant national and local work safety laws and regulations.

We are committed to providing a safe and healthy working environment for our employees and have received GB/T 28001:2001 certification for our occupational health and safety management system in January 2011. GB/T 28001:2001 is a voluntary national PRC standard for occupational health and safety management systems issued by the Standardization Administration of the PRC. Since the establishment of our Group, we have adopted and implemented a series of occupational health and safety procedures and measures for our business operations. We have formulated guidelines on occupational safety, such as production safety measures and procedures for handling certain emergency, to all employees. We hold monthly work safety meeting mechanism at various levels of our management to exchange information of recent experience and measures among our different operational divisions, review the issues discovered in the implementation of our work safety policies and improve our overall work safety and accident prevention. We also have a dedicated production safety management division, which is responsible for managing and implementing occupational health and safety practices at our facilities. All personnel of our production safety management division have taken training courses for work safety held by the government, and possess necessary qualification for work safety issued by the local government of Binzhou City. In addition, we have installed safety protection and inspection equipment at our work site, and we monitor all equipment and facilities on a real time basis. Furthermore, we hold regular work safety training sessions for our special skilled workers and general staff to increase safety awareness, and conduct routine occupational health examinations for our employees.

We have devoted a substantial amount of resources to work safety and accident prevention. As of June 30, 2012, we had not been involved in any accident causing death or serious bodily injury in the course of our business operations.

Our Group has obtained confirmation letters dated March 20, 2012 from the Zouping County Work Safety Supervision Bureau for Shandong Hongqiao and Aluminum & Power and the Binzhou Work Safety Bureau for Zhengtong, which confirmed that Shandong Hongqiao, Aluminum & Power and Zhengtong have complied with the relevant PRC laws and regulations in respect of work safety and have obtained the requisite approvals and that the facilities of the three subsidiaries have been designed and constructed by contractors with appropriate qualifications. The authorities also confirmed that, as of March 20, 2012:

- (i) these subsidiaries have complied with the PRC national and local safety laws and regulations;
- (ii) there has not been any work safety accidents in these subsidiaries since their respective dates of establishment;
- (iii) the subsidiaries have not been penalized by the relevant authorities for work safety matters;
- (iv) the subsidiaries did not have any work-safety related disputes with the relevant authorities; and
- (v) the subsidiaries have not violated any PRC work safety related laws and regulations which may lead to the imposition of any penalty by the relevant authorities.

Our PRC legal advisors, Zong Heng Law Firm, have advised us that the Zouping County Work Safety Supervision Bureau and the Binzhou Work Safety Bureau are the competent authorities to issue such confirmations.

## PROPERTIES

As of June 30, 2012, we operated our businesses through six properties in the PRC for our production facilities, offices and other places of operations. These properties comprised: (i) the land use rights to twelve parcels of land with a total site area of approximately 8,599,396 sq.m.; (ii) 253 buildings with a total gross floor area of approximately 1,466,396 sq.m.; and (iii) 166 buildings under construction with a total planned gross floor area of approximately 863,680 sq.m. We have obtained all the required land use rights and building ownership certificates for all of our land and completed buildings, respectively. We leased parcels of land from Chuangye Group from July 2005 and acquired the land use rights of such land from Chuangye Group pursuant to land use right transfer agreements entered into between Chuangye Group and us in January 2010, on which all of our aluminum products facilities are located. The consideration of such land use rights by Chuangye Group and was fully paid by us to Chuangye Group in January 2010.

#### **INSURANCE**

We maintain insurance policies with insurance companies in China which cover losses to our equipment, facilities, buildings and their improvements, vehicles and inventories arising from fire, lightning, explosion and aircraft accidents. Insurance coverage for our fixed assets and inventories in China amounted to approximately RMB15,300.0 million (US\$2,408.3 million) as of June 30, 2012. Currently, we do not maintain business interruption insurance or insurance relating to the delivery of our products. Our sales contracts generally provide that, once the products leave our manufacturing site, the ownership of such products are immediately transferred to our customers. As a result, we are not responsible for the risk of losses occurring during transportation. In addition, for losses of and damages to our molten aluminum alloy products during delivery, Binzhou Yinhe, our delivery service provider, is responsible if such losses and damages are attributable to its fault. The logistics service providers for aluminum alloy ingots, aluminum alloy casting-rolling products and aluminum busbars are generally responsible for losses of and damages to our products incurred during delivery pursuant to the relevant service agreements. We do not maintain any product liability insurance. We have not made any material claims under our insurance policies and have not experienced any material business interruptions since we commenced our operations.

## **EMPLOYEES**

As of June 30, 2012, we employed 23,576 employees. The table below sets forth the breakdown of our employees by functions as of June 30, 2012.

Function	Number of employees
Aluminum production	14,817
Alumina production	3,423
Power station	2,727
Supply	440
Sales, marketing and delivery	243
Quality control	644
General management	1,282
Total	23,576

We believe that our management policies, working environment and employee development opportunities and benefits have contributed to good employee relations and employee retention. We provide additional benefits to our employees, such as free accommodation, allowances for medical care, food and transportation. We have not experienced any labor strikes or major labor disputes since our inception.

We provide training programs for our employees to equip them with the requisite skills and knowledge. This is achieved through various internal training programs. Each new employee is provided with necessary training programs and supervision from senior employees during the first four months on the job to facilitate the transfer of necessary skills.

The remuneration package of our employees includes salary and various types of allowances. In addition, we have established a performance-based award system under which employees may be awarded additional bonuses. Under the relevant labor and social welfare laws and regulations, we are required to pay each of our non-rural residence employees a monthly social insurance premium covering pension insurance, medical insurance, unemployment insurance, work-related injury insurance, maternity insurance and housing reserve fund. As required by PRC regulations, we participate in the social insurance schemes operated by the relevant local government authorities. The local governmental social insurance authorities in Zouping County and Binzhou City, which have competent jurisdiction over Aluminum & Power and Shandong Hongqiao, respectively, have confirmed in their letters dated July 23, 2012 respectively that, with respect to Aluminum & Power and Shandong Hongqiao:

- (i) we have complied with all national and local laws and regulations in relation to social insurance payments for our employees,
- (ii) we have not been punished for violating such laws or regulations,

- (iii) there is no outstanding dispute between the social insurance authority and us, or any outstanding social insurance payment that we owe to the local social insurance authority, and
- (iv) we are not required to pay social insurance premiums for our workers with rural residences.

As of December 31, 2009, 2010 and 2011 and June 30, 2012, we had approximately 3,012, 9,070, 12,405 and 15,696 employees with rural residence, respectively, accounting for approximately 40.8%, 65.3%, 68.5% and 66.6% of our total employees as of December 31, 2009, 2010 and 2011 and June 30, 2012, respectively. Our Directors have confirmed that we have complied with the applicable employment laws and regulations in China in all material respects and were not in breach of such laws and regulations during the three years ended December 31, 2011 and the six months ended June 30, 2012.

Our PRC legal advisors, Zong Heng Law Firm, have advised us that, as Zouping County Labor and Social Security Bureau are the government authorities in charge of social insurance in Zouping County, it is competent to set the requirements and make confirmation in respect of the social insurance issues of Aluminum & Power and Shandong Hongqiao according to its understanding of relevant laws and policies and local practical situation.

Our PRC legal advisors, Zong Heng Law Firm, have further advised us that, as the Labor and Social Security Office of the Binzhou Economic Development Zone is the government authority in charge of social insurance in Binzhou Economic Zone, where Zhengtong is located, it is competent to set the requirements and make confirmation in respect of the social insurance issues of Zhengtong according to its understanding of relevant laws and policies and local practical situation. As confirmed in the confirmation letters dated as of July 23, 2012 issued by the Labor and Social Security Office of the Binzhou Economic Development Zone, Zhengtong has been in compliance with the labor and social security regulations and policies.

However, there is no assurance that the confirmations of the Zouping County Labor and Social Security Bureau and the Labor and Social Security Office of the Binzhou Economic Development Zone will not be challenged by higher authorities, such as higher government offices supervising and guiding the Zouping County labor and Social Security Bureau and the Labor and Social Security Office of the Binzhou Economic Development Zone under PRC laws and regulations.

## **Discontinued Operations**

During the three years ended December 31, 2011 and the six months ended June 30, 2012, we had discontinued operations. The profit from our discontinued operations was approximately RMB31.5 million, nil and nil for 2010 and 2011 and the six months ended June 30, 2012, respectively, and the net loss was approximately RMB9.4 million for 2009. On May 25, 2006, Aluminum & Power entered into the Agency Agreement with Chuangye Group, pursuant to which Chuangye Group operated its own alumina operations in the name of Aluminum & Power for the period from May 26, 2006 to December 31, 2009. In addition, we operated a dyeing business under Shandong Hongqiao and a caustic soda manufacturing business under Marine Chemical. To focus on our aluminum production business, we disposed of the dyeing business and the caustic soda manufacturing business in early 2010.

## Alumina Agency Business

On May 25, 2006, Aluminum & Power entered into the Agency Agreement with Chuangye Group, which expired on December 31, 2009. At the time of the Agency Agreement, Aluminum & Power was a subsidiary of Chuangye Group. We procured alumina exclusively from Chuangye Group for 2009. Chuangye Group is a company in which Mr. Zhang directly and indirectly held an approximately 33.72% equity interest as of June 30, 2012. The key features of this agency arrangement include:

(i) Chuangye Group operated its alumina business in the name of Aluminum & Power, and Aluminum & Power was responsible for the sales of alumina, procurement of raw materials, incurrence of operating expenses, collection of proceeds from settlement of trade receivables and payment of the liabilities in connection with the procurement of raw materials and operating expenses in Aluminum & Power's name for and on behalf of Chuangye Group and executed all of the legal documents pertinent to the alumina production business;

- (ii) Chuangye Group held the titles and ownership of the assets pertinent to the alumina production business (such assets were injected into Aluminum & Power as a partial contribution to its registered capital by Chuangye Group and were eventually transferred back to Chuangye Group on June 5, 2006) and was responsible for the production of alumina;
- (iii) the liabilities, risks and results relating to the alumina production business were all attributable to Chuangye Group and the accumulated profits from the alumina production business were paid by Aluminum & Power to Chuangye Group;
- (iv) all taxation pertinent to the alumina production business was paid by Aluminum & Power and was charged back to Chuangye Group;
- (v) Chuangye Group paid Aluminum & Power a management fee for the sales of alumina to third parties at a rate of RMB200 and RMB100 per ton for the two years ended December 31, 2008 and 2009, respectively, which was determined based on the assumption that the increasing sales volume of alumina during the term of the Agency Agreement would offset the decrease in the management fee rate;
- (vi) Aluminum & Power was entitled to purchase alumina from Chuangye Group at production cost during the term of the Agency Agreement; and
- (vii) all of the employees engaged in the alumina production business were employed by Chuangye Group and their salaries were paid by Aluminum & Power on behalf of Chuangye Group, which were charged back to Chuangye Group.

The Agency Agreement was valued at RMB443.0 million by Jones Lang LaSalle Sallmanns Limited, an independent valuer, as intangible assets at the time when our Group obtained control of Aluminum & Power, which was fully amortized from June 2006 to December 2009.

The following table sets forth the management fee rate and the total management fee we received from Chuangye Group pursuant to the Agency Agreement for the periods indicated:

	Year e	nded December	Six months ended June 30,		
	2009	2010	2011	2011	2012
Management fee rate (RMB per ton)	100	_	_	-	_
Total management fee (RMB in					
thousand)	154,982	_	_	-	-

In addition, as part of the agency arrangement, Aluminum & Power entered into a steam supply agreement with Chuangye Group on December 20, 2006, pursuant to which Aluminum & Power supplied steam to Chuangye Group for its alumina production free of charge. For 2009, we provided approximately 2,104,252 tons of steam to Chuangye Group.

The alumina production facilities owned by Chuangye Group at the time are located in Zouping Economic Development District and are in close proximity to our Zouping manufacturing base. These alumina production facilities are physically separated from our aluminum production facilities and other facilities.

Before entering into the alumina agency arrangement, the then director and senior management of Aluminum & Power, namely Mr. Zhang and Mr. Yang Congsen, have considered:

- (i) the terms of the Agency Agreement, including the collection of management fees and the assumption of all liabilities, risks and losses in connection with the alumina production business by Chuangye Group;
- (ii) Chuangye Group's ability and willingness to perform its obligations under the Agency Agreement based on its scale of operations and financial position; and
- (iii) the internal control policies and compliance mechanisms of the alumina production business, including production safety management documents.

The then director and senior management of Aluminum & Power were of the view that:

- (i) the terms of the Agency Agreement were reasonable and in the interest of our Group;
- (ii) this alumina agency arrangement would not only secure Aluminum & Power a stable supply of alumina, but was also financially favorable to Aluminum & Power through the collection of management fees, thereby improving its profitability and financial flexibility to better carry out its development plan; and
- (iii) Chuangye Group would be able and willing to perform its obligations under the Agency Agreement.

As confirmed by Chuangye Group, it entered into this transaction which was favorable to Aluminum & Power as Aluminum & Power was its subsidiary at that time and would be its related party after Aluminum & Power was acquired by Shandong Hongqiao on June 9, 2006. In addition, Chuangye Group also derived the following benefits for its alumina production business by entering into the Agency Agreement with Aluminum & Power, including:

- (i) the free supply of steam by Aluminum & Power to Chuangye Group for its alumina production until December 2009;
- (ii) the assumption of working capital by Aluminum & Power under the alumina agency arrangement;
- (iii) the procurement of a large amount of alumina by Aluminum & Power from Chuangye Group which allowed Chuangye Group to achieve a higher and more stable utilization rate of its alumina manufacturing facilities, which in turn helped Chuangye Group reduce its unit cost of sales of alumina and minimize the potential chemical deterioration of the alumina production equipment of Chuangye Group as a result of under-utilization; and
- (iv) the operation of the alumina business in the name of Aluminum & Power allowed Chuangye Group to focus on and enhance its corporate profile as one of the largest textile companies in the PRC at that time.

We incurred from this agency arrangement a loss of approximately RMB1.9 million for 2009. The loss of approximately RMB1.9 million for 2009 was due to the fact that the amortization of intangible assets of approximately RMB111.9 million was not tax deductible. As a result, the income tax for the alumina agency business was greater than its profit before taxation for 2009.

In December 2009, Chuangye Group sold its alumina production facilities to Gaoxin. As confirmed by Chuangye Group, it sold its alumina production facilities to focus on its textile business, and Gaoxin had financial capability to purchase the alumina production facilities at that time. As advised by Gaoxin, it acquired the aluminum production facilities with a view to leveraging its own electricity generating capacity. Since Chuangye Group's disposal of the alumina production facilities to Gaoxin, neither Chuangye Group nor our Group has acquired any alumina production facilities or been involved in alumina production or red mud production.

Pursuant to the alumina supply agreement between Gaoxin and our Group, Gaoxin agreed to provide our Group with alumina at discount, provided that our Group picks up the alumina in bulk by themselves, that our purchase volume is more than one million tons every year and that our Group paid a deposit of approximately RMB400 million. On this basis, the alumina procurement cost of our Group is lower than the price of alumina supplied to third parties by Gaoxin. See "– Procurement – Raw materials – Procurement of alumina." As such, the Directors believe that our Group will be able to maintain its competitive strength of having a competitive cost structure even after the change in pricing mechanism in 2010.

Our Directors have confirmed that for 2009, when the alumina production business was run by Chuangye Group, the overlap between the management teams of Chuangye Group and us were Mr. Zhang, Mr. Zhang Bo and Mr. Yang Congsen, who were directors of both Aluminum & Power and Chuangye Group. However, none of them was directly involved in the alumina business of Chuangye Group.

Our PRC legal advisors, Zong Heng Law Firm, have advised us that Chuangye Group and Aluminum & Power are legally incorporated and validly existing, and the Agency Agreement is not in violation of any PRC laws or regulations and is legal and valid.

As the production of alumina involves different raw materials, production process and facilities, our aluminum production facilities cannot be used to produce alumina.

## **Dyeing Business**

Historically, Shandong Hongqiao was engaged in the dyeing business. On January 4, 2010, Shandong Hongqiao entered into an agreement with Chuangye Group, pursuant to which Chuangye Group transferred its assets of aluminum production to Shandong Hongqiao at a price of RMB1,189.7 million. Pursuant to this agreement, Shandong Hongqiao paid the purchase price in a combination of cash amounting to RMB1,154.3 million and the assets of its dyeing business, which were valued at RMB35.4 million. The payment was fully settled in March 2010 by Shandong Hongqiao with cash generated from our operations and new bank loans we obtained at that time. Our PRC legal advisors, Zong Heng Law Firm, have advised us that Shandong Hongqiao is legally incorporated and validly existing, has obtained the necessary approvals and permits for carrying out the dyeing business, and, based on the confirmation issued by relevant authorities, Shandong Hongqiao has complied with relevant laws and regulations with respect to the dyeing business. Our PRC legal advisors, Zong Heng Law Firm, have further advised us that this agreement is legal and valid, and accordingly we are no longer responsible for any expenses or losses arising from the dyeing business upon the completion of transfer of the dyeing business to Chuangye Group.

The loss from the dyeing business was approximately RMB0.9 million for 2009. We recorded a gain of approximately RMB24.9 million, nil and nil for 2010, 2011 and for the six months ended June 30, 2012, respectively, due to the disposal of the dyeing business.

## Caustic Soda Manufacturing Business

Marine Chemical was established on March 2, 2006 in the PRC as a limited liability company, and was disposed by us to Shandong Huibin Dyeing Co., Ltd. in January 2010. Our PRC legal advisors, Zong Heng Law Firm, have advised us that Marine Chemical is legally incorporated and validly existing, has obtained the necessary approvals and permits for carrying out its business, and, based on the confirmation issued by relevant authorities, Marine Chemical has complied with relevant laws and regulations with respect to its business. Our PRC legal advisors, Zong Heng Law Firm, have further advised us that the share transfer framework agreement dated December 28, 2009 among Shandong Hongqiao, Huibin Dyeing, Marine Chemical, Profit Long Investment and Chuangye Group is legal and valid, and pursuant to this agreement, we are no longer responsible for any expenses or losses arising from the caustic soda manufacturing business from January 1, 2010.

The construction of Marine Chemical was commenced in March 2006 and it has been at the trial production stage since May 2009. It was principally engaged in production and sales of caustic soda. Until December 2009, Marine Chemical provided caustic soda to Chuangye Group for its alumina production as well as other customers. Our loss from Marine Chemical amounted to approximately RMB6.6 million for 2009. We recorded a gain of approximately RMB6.6 million for 2010, nil and nil for 2011 and for the six months ended June 30, 2012 due to the disposal of the caustic soda manufacturing business.

## **INTERNAL CONTROL**

To enhance the internal control of our Group, our Company has engaged an independent internal control consultant to review the internal controls of our PRC subsidiaries, which included Shandong Hongqiao, Aluminum & Power and Zhengtong.

The review of the internal control consultant has identified a number of areas requiring improvement, which primarily related to the implementation of additional policies and procedures including but not limited to the policy for nomination and selection of Board members, compensation committee and audit committee charter and procedures, and policies and procedures for disclosures, revision of certain existing policies and procedures including but not limited to treasury management, and further enforcement of the procedures

that are currently stated in the policies. The internal control consultant has provided recommendations for all findings. The findings identified by the internal control consultant in terms of policies/procedures and executions of control have been remedied.

# **LEGAL PROCEEDINGS**

We may from time to time become a party to various legal or administrative proceedings arising in the ordinary course of our business.

As of the date of this document, other than as described in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Contingent Liabilities", we were not a party to any material arbitration, litigation or administrative proceedings which could be expected to have a material adverse effect on our business or results of operations. We are not aware of any pending or threatened arbitration, litigation or administrative proceedings against us.