Certain information and statistics set out in this section have been extracted from various official government publications. We have taken reasonable care in the extraction, compilation and reproduction of such information presented in this section and elsewhere in this prospectus. None of us or the Joint Sponsors, the Underwriters, or any of their respective affiliates or advisors has independently verified the information directly or indirectly derived from these sources, and such information may not be consistent with other information compiled within or outside China.

We have commissioned CRU Strategies Limited ("CRU"),⁽¹⁾ a management consulting company based in London, the United Kingdom with a focus on the global aluminum extrusion industry, and Sunlight Metal Consulting (Beijing) Co. Ltd. ("Sunlight Metal"),⁽²⁾ a consulting company in China with a focus on the PRC aluminum extrusion industry, to prepare reports⁽³⁾ on the aluminum extrusion industry.⁽⁴⁾

THE CHARACTERISTICS AND APPLICATION OF ALUMINUM EXTRUSION PRODUCTS

Aluminum is a lightweight, corrosion resistant metal, which is high in electrical conductivity and suitable for a wide range of applications. Because of its abundance and broad applications, aluminum is one of the most widely-used nonferrous metals in the world. Aluminum that is often used for fabrication includes primary aluminum smelted from the raw material alumina and recycled aluminum produced from scrap metal.

⁽¹⁾ CRU provides management, strategy and commercial consulting services to producers and users of metals and to governments and international agencies, banks and investors with interests in the mining, metals, power, cables, fertilizer and chemical industries. CRU's expertise covers nonferrous metals, precious metals, steel and ferroalloys. CRU is part of the CRU Group which was founded in late 1960s and is a source of information, analysis and consultancy for the mining, metals, power, cables, fertilizer and chemical industries.

⁽²⁾ Sunlight Metal, based in China and founded in 2006, is principally engaged in providing market research, industry research, consultancy and advisory services in respect of aluminum and magnesium.

⁽³⁾ CRU and Sunlight Metal are the only data source providers which have been commissioned by us.

⁽⁴⁾ The parameters and assumptions of CRU's and Sunlight Metal's reports reflect their understanding of the prevailing international and China extrusion markets at the time of preparation of the reports. The historical market data are generated through the analysis of relevant data such as production, trade and consumption that are prepared by various governmental and industry associations such as the Aluminum Association (which serves the United States and Canada) and European Aluminum Association, China Nonferrous Metals Industry Association, China Association of Automobile Manufacturers, China Construction Metal Structure Association and China Association of Shipbuilding Industry. For some countries, published data may not be available or up-to-date, in which case it is necessary to make estimates based on regular contact (e.g., via telephone interviews and in-person meetings) with industry participants such as producers, consumers and traders, as well as secondary sources such as conference presentations and news articles. Market forecasts are driven by CRU's and Sunlight Metal's own in-depth, macro-economic platforms that present CRU's and Sunlight Metal's view of the key demand drivers such as gross domestic product and industrial production on a country-by-country and key sector basis. CRU and Sunlight Metal then seek views from their industry contacts on factors such as intensity of use in key end-use sectors and inventory changes, and combine these with their respective macro-economic outlook and long experience of the shape of cycles in the industry to come up with a forecast. The terms of engagement in respect of the reports prepared by CRU and Sunlight Metal are primarily standard terms including consulting fees, payment method, timing of completion of the report and confidentiality terms. The consulting fees in the aggregate amounted to not more than RMB1.0 million were paid by the Company. Such fees were determined under normal commercial terms after arms' length negotiations. Neither CRU nor Sunlight Metal had any previous dealings with our Group.

Semi-fabricated aluminum products involve the processing of primary aluminum and include both wrought products and cast products. A wrought product results from mechanical working of aluminum by processes such as rolling, extrusion and forging. A cast product is produced by introducing molten aluminum into a mold. Aluminum extrusion products are a type of semi-fabricated aluminum product.

The features of extrusion products include design flexibility, strength, lightweight construction and resistance to corrosion. These features have encouraged the use of extrusion products in a number of applications. In the transportation industry, aluminum's lightweight quality reduces the energy required to accelerate and decelerate, and its high resistance to corrosion reduces maintenance costs. Aluminum is also an ideal construction material for both decorative and functional applications. It can be easily fabricated, installed, painted or bonded to other materials. Aluminum is stronger than many other materials and thus allows a slimmer profile in doors and windows. It can also add extra rigidity and security to structures.

Aluminum extrusion products are primarily used in the transportation, machinery and equipment, construction and other industries. The table below summarizes the main specific applications of aluminum extrusion products by industries.

	Machinery and		
Transportation	equipment	Construction	Other
Train body shells, aircraft fuselage, wings, landing gear and seats, and bumpers	Elevators and escalators	Window and door frames	HVAC equipment
Heat exchangers	Guards, handrails and platforms	Curtain walls	Solar panels
Car and truck structures	Agricultural machinery	Structural frames	Lighting systems
Sunroofs	Heat sinks	Bridges	Ladders
Truck side-planks, door frames and safety beams	Modular handling and assembly line systems	Guardrails and directional signs	

Source: CRU

GLOBAL ALUMINUM EXTRUSION INDUSTRY

Global Aluminum Extrusion Consumption

Global aluminum extrusion consumption has grown from approximately 8.7 million tons in 2001 to approximately 13.2 million tons in 2007, representing a CAGR of approximately 7.2%. In 2007, China was the largest aluminum consuming market, accounting for approximately 39% of global aluminum extrusion products consumption.

The table below sets out the historical and projected global aluminum extrusion consumption by region and the respective CAGR for the period between 2001 and 2010.

											2001-	2005-	2007-
											2007	2007	2010
	2001	2002	2003	2004	2005	2006	2007	2008E	2009E	2010E	CAGR	CAGR	CAGR
China	1,719	1,828	2,012	2,479	2,746	3,650	5,143	5,685	5,799	6,440	20.0%	36.8%	7.8%
Europe	2,824	2,852	2,878	2,997	3,020	3,209	3,302	3,255	3,121	3,178	2.6%	4.6%	(1.3)%
North America .	1,701	1,702	1,716	1,895	2,004	2,041	1,792	1,532	1,321	1,325	0.9%	(5.4)%	(9.6)%
Middle East and													
Africa	337	349	363	378	407	447	498	531	530	560	6.7%	10.5%	4.0%
Japan	1,017	988	1,013	1,043	1,007	1,018	975	898	862	857	(0.7)%	(1.6)%	(4.2)%
Rest of													
Australasia ⁽¹⁾ .	857	893	951	1,029	1,077	1,161	1,230	1,292	1,292	1,356	6.2%	6.9%	3.3%
Latin America	243	225	219	253	237	255	258	262	269	272	1.0%	4.3%	1.8%
Total													
Consumption.	8,698	8,838	9,153	10,075	10,499	11,781	13,198	13,456	13,195	13,989	7.2%	12.1%	2.0%

Global aluminum extrusion consumption by region, 2001-2010 ('000 tpy)

Source: CRU

(1) Includes all countries and territories in Asia and Oceania except China and Japan.

According to CRU, 2007 was the cyclical peak year for growth across many world economies, but the credit crunch had a modest effect from late 2007 and through the first half of 2008. The sub-prime mortgage crisis affected first and foremost private fixed investment in residential assets, which in the U.S. fell 17.9% in 2007 and 20.7% in 2008. The situation was mirrored on a smaller scale in Japan, where a 9.1% drop in 2007 was followed by a 9.3% drop in 2008. Europe felt the impact only in 2008, while China remained above the 15% level. Non-residential constructions fared a little better, but still dropped substantially throughout 2008.

Generally speaking, consumer-oriented sectors such as domestic appliances and motor vehicles began their slide at the end of 2007, while sectors connected with industrial-scale production, such as engineering and freight transport only felt the full brunt of the downturn in 2008. The latter are more significant for aluminum extrusion demand, and that is why consumption first registered a significant drop in the developed world in the fourth guarter of 2007. In Europe, apparent consumption fell by 3.5% in the fourth guarter of 2007, and then by 5.1%, 6.1%, 8.2% and 8.5%, respectively, over the four guarters in 2008. In the U.S. and Canada, consumption dropped by 14.5% overall in 2007 and by 8.0% in 2008. In China, growth for September 2008 was only 4.4%, compared with growth figures of over 20% for each other month in 2008.

From 2007 onwards, global aluminum extrusion consumption is expected to grow to approximately 14.0 million tons in 2010, with a CAGR of approximately 2.0% from 2007 to 2010. While North America, Japan and Europe are expected to see a decline in consumption, China is expected to grow at a CAGR of approximately 7.8%, causing it to remain the largest consuming country of aluminum extrusion products, accounting for approximately 46% of total global projected consumption in 2010.

The charts below set out a breakdown of global aluminum extrusion consumption by region in 2007 and 2010 (projected).

Global aluminum extrusion consumption by region, 2007 and 2010



2010E ('000 tons)

Latin

America

272

2%

China

6,440

46%

Source: CRU

(1) Includes all countries and territories in Asia and Oceania except China and Japan.

The majority of aluminum extrusion products are used in the construction industry. During the period between 2001 and 2007, consumption by the construction industry grew strongly from approximately 5.4 million tons to approximately 8.3 million tons, representing a CAGR of approximately 7.5%. Consumption by the transportation industry grew from approximately 1.2 million tons to approximately 1.7 million tons, representing a CAGR of approximately 6.7%. In addition, consumption by the machinery and equipment industry has experienced rapid growth from approximately 1.0 million tons in 2001 to approximately 1.6 million tons in 2007, representing a CAGR of approximately 8.8%.

The table below sets out the historical and projected global aluminum extrusion consumption by end-use and the respective CAGR for the period between 2001 and 2010.

											2001- 2007	2005- 2007	2007- 2010
	2001	2002	2003	2004	2005	2006	2007	2008E	2009E	2010E	CAGR	CAGR	CAGR
Construction	5,373	5,417	5,576	6,071	6,311	7,205	8,293	8,506	8,385	8,897	7.5%	14.6%	2.4%
Transportation	1,158	1,210	1,290	1,479	1,570	1,690	1,707	1,663	1,586	1,671	6.7%	4.3%	(0.7)%
Machinery and													
equipment	957	982	1,042	1,182	1,237	1,386	1,586	1,655	1,634	1,750	8.8%	13.2%	3.3%
Electrical	347	337	327	365	381	420	448	449	433	446	4.3%	8.3%	(0.2)%
Consumer													
durables	437	460	476	510	518	566	610	620	602	642	5.7%	8.5%	1.7%
Other	425	431	442	468	481	513	555	562	556	584	4.6%	7.5%	1.7%
Total	8,698	8,838	9,153	10,075	10,499	11,781	13,198	13,456	13,195	13,989	7.2%	12.1%	2.0%

Global aluminum extrusion consumption by end-use, 2001-2010 ('000 tpy)

Source: CRU

Construction activities are expected to be affected by the world economic environment. However, the construction industry is still expected to remain the largest consuming sector of aluminum extrusion products with a dominant market share of more than 60% globally. Consumption of aluminum extrusion products by the transportation industry and machinery and equipment industry will continue to constitute an important part of the global consumption. The charts below set out a breakdown of global aluminum extrusion consumption by end-use in 2007 and 2010 (projected).



Global aluminum extrusion consumption by end-use, 2007 and 2010

Source: CRU

Global Aluminum Extrusion Production

Global aluminum extrusion production has grown from approximately 8.8 million tons in 2001 to approximately 13.4 million tons in 2007, representing a CAGR of approximately 7.4%. China's aluminum extrusion production contributed approximately 43% of global aluminum extrusion production in 2007.

The table below sets out the historical and projected global aluminum extrusion production by region and the respective CAGR for the period between 2001 and 2010.

											2001-	2005-	2007-
											2007	2007	2010
	2001	2002	2003	2004	2005	2006	2007	2008E	2009E	2010E	CAGR	CAGR	CAGR
China	1,720	1,850	2,100	2,650	3,050	4,230	5,717	6,187	6,301	6,942	22.2%	36.9%	6.7%
Europe	2,871	2,915	2,959	3,185	3,162	3,281	3,130	3,089	2,943	2,988	1.5%	(0.5)%	(1.5)%
North America	1,670	1,659	1,652	1,789	1,858	1,873	1,615	1,393	1,172	1,168	(0.6)%	(6.8)%	(10.2)%
Middle East and													
Africa	334	331	339	350	373	389	451	496	506	548	5.1%	10.0%	6.7%
Japan	1,019	991	1,021	1,054	1,026	1,035	989	910	871	862	(0.5)%	(1.9)%	(4.5)%
Rest of													
Australasia ⁽¹⁾	893	901	979	1,063	1,110	1,181	1,250	1,315	1,316	1,381	5.8%	6.1%	3.4%
Latin America	263	248	242	259	237	247	294	287	284	277	1.8%	11.4%	(2.0)%
Total Production	8,769	8,895	9,292	10,350	10,816	12,236	13,446	13,677	13,393	14,164	7.4%	11.5%	1.7%

Global aluminum extrusion production by region 2001-2010 ('000 tpy)

Source: CRU

(1) Includes all countries and territories in Asia and Oceania except China and Japan.

It is important to note that some of the previously existing capacity in North America, as well as in Japan, has effectively been transferred to lower-cost areas such as China, Thailand, and Eastern Europe.

Major Global Aluminum Extrusion Producers

The global aluminum extrusion industry is very fragmented due to the small scale of extrusion plants and the localized nature of the business. The majority of plants are small, privately owned enterprises. The top 10 leading global aluminum extrusion producers only accounted for an estimated 23% of the global aluminum extrusion production in 2007. Since aluminum extrusion products are usually custom-made in small-scale plants, same-site vertical integration with primary production does not confer significant advantages. Only a few of the major integrated aluminum companies have continued their involvement in the extrusion sector.

The table below sets out the top 10 leading aluminum extrusion producers in the world based on their respective estimated production capacity in 2007.

Ranking ⁽¹⁾	Company	Headquarters	Production capacity ('000 tpy)	Number of plants ⁽²⁾	Number of extrusion presses ⁽²⁾
1	Sapa AB ⁽³⁾	Sweden	860	40	111
2	Norsk Hydro ASA	Norway	622	43	83
3	Zhongwang PRC	China	505	1	64
4	Alcoa, Inc.	U.S.	487	21	101
5	Alcan, Inc. ⁽⁴⁾	Canada	372	18	52
6	Indalex Holding Corp	U.S.	350	13	35
7	Asia Aluminum Holdings Limited	China	350	2	38
8	YKK Corporation	Japan	272	6	38
9	Nippon Light Metal Co., Ltd	Japan	220	11	25
10	Tostem Corporation	Japan	198	6	30

Top 10 leading aluminum extrusion producers in the world in 2007 in terms of production capacity

Source: CRU

Notes:

- (1) The top 10 leading aluminum extrusion producers in the world are ranked in terms of production capacity in 2007. As some of these producers are privately owned companies or integrated aluminum producers which do not publish production information by segment, the relevant aluminum extrusion production volume of these producers is not available to CRU and therefore not available for disclosure in the prospectus.
- (2) Plant/extrusion press count data includes plants where a company owns a minority stake. These plants are treated as company plants.
- (3) One exception concerns the plants in Alcoa, Inc.'s soft alloy division which, following the joint venture with Sapa AB, are now under the majority ownership of Sapa AB, which also operates them. They have therefore been included in Sapa AB's plant count, but not in Alcoa, Inc.'s.
- (4) Currently known as Rio Tinto Alcan since the recent merger between Alcan, Inc. and Rio Tinto.

Among the top three leading aluminum extrusion producers in the world, Zhongwang PRC is the largest producer in Asia, while Sapa AB and Norsk Hydro ASA operate overwhelmingly in North America and Europe.

PRC ALUMINUM EXTRUSION INDUSTRY

Overview of the PRC Economy

China's economy has had decades of rapid growth since its economic reform in the late 1970s. According to the National Bureau of Statistics of China ($\oplus \pm \Lambda \boxtimes \oplus \pi$) ("China Statistics Bureau"), China's GDP increased from approximately RMB10,965.5 billion in 2001 to approximately RMB24,953.0 billion in 2007, representing a CAGR of approximately 14.7% and making China one of the fastest growing economies in the world.

The fast growing PRC economy has spurred growth in China's fixed asset investment, which increased from approximately RMB3,721.3 billion in 2001 to approximately RMB13,732.4 billion in 2007, representing a CAGR of approximately 24.3% and outpacing the growth of China's GDP during the same period.

The table sets out year-on-year growth of China's GDP and its fixed asset investment for the period between 2001 and 2007.

								2001- 2007	2005- 2007
(RMB billion)	2001	2002	2003	2004	2005	2006	2007	CAGR	CAGR
GDP	10,965.5	12,033.3	13,582.3	15,987.8	18,321.7	21,192.4	24,953.0	14.7%	16.7%
Fixed asset investment	3,721.3	4,350.0	5,556.7	7,047.7	8,877.4	10,999.8	13,732.4	24.3%	24.4%

Source: China Statistics Bureau

China Aluminum Extrusion Consumption

As a result of the country's robust economic growth, aluminum extrusion consumption in China has been experiencing rapid growth since 2001. China is the largest consumer of aluminum extrusion products in the world, accounting for approximately 39.0% of global aluminum extrusion consumption in 2007. In 2007, China consumed approximately 5.1 million tons of aluminum extrusion products, representing a CAGR of approximately 20.0%, compared with approximately 1.7 million tons in 2001. It is estimated that China's aluminum extrusion consumption will continue to grow to approximately 6.4 million tons in 2010, representing a CAGR of approximately 7.8% from 2007 to 2010.

The chart below sets out the historical and projected aluminum extrusion consumption in China for the period between 2001 and 2010.

China aluminum extrusion consumption, 2001-2010E



Source: CRU

In China, aluminum extrusion products are widely used in the transportation, machinery and equipment, construction, consumer durables and other industries.

The consumption mix of aluminum extrusion products in China is different from the consumption mix in North America. In 2007, the proportion of aluminum extrusion products consumed in the transportation industry in China is lower than that in North America, being 9% and 31% in China and North America, respectively. The chart below sets out a breakdown of PRC and North America aluminum extrusion consumption by end-use in 2007.



PRC and North America aluminum extrusion consumption by end-use, 2007

Source: Sunlight Metal, CRU

The growth in the industries in which aluminum extrusion products are used affects the demand for various types and configurations, and stimulates continuous research and development of aluminum extrusion products. The chart below sets out a breakdown of PRC aluminum extrusion consumption by end-use in 2010.



PRC aluminum extrusion consumption by end-use, 2010E

Source: Sunlight Metal

According to Sunlight Metal, the consumption in the industrial aluminum extrusion market and the construction aluminum extrusion market increased by a CAGR of approximately 28.9% and 21.1%, respectively, for the period between 2001 and 2007. The consumption in the industrial aluminum extrusion market and the construction aluminum extrusion market is expected to increase by a CAGR of approximately 10.0% and 8.4%, respectively, for the period from 2007 to 2010 according to Sunlight Metal. The chart below sets out the projected CAGR of aluminum extrusion consumption by end-use in China for the forecast period between 2007 and 2010, in which consumption in the transportation industry is expected to grow faster compared to other industries from 2007 to 2010.

CAGR of aluminum extrusion consumption by end-use in China, 2007-2010E



Source: Sunlight Metal

Aluminum Extrusion Consumption in the PRC Transportation Industry

Transportation is one of the fastest growing market segments for aluminum extrusion products in China.

Driven by the rapid development of the transportation industry and the continuous technological advances in means of transportation, aluminum extrusion products are expected to enjoy increasingly wide applications in railway and metropolitan railway, automotive, shipbuilding, aviation and other transportation sectors.



Aluminum extrusion consumption in the PRC transportation industry, 2001-2010E⁽¹⁾

Source: Sunlight Metal

(1) The estimated figures for 2008 to 2010 do not take into consideration the large fiscal stimulus packages announced by the PRC government.

However, aluminum extrusion consumption in the transportation industry in 2007 was still relatively low at approximately 8.6% of total China's aluminum extrusion consumption compared to those of North America, Europe and Japan at approximately 27%, 18% and 15%, respectively.

In 2007, the transportation industry consumed approximately 510,000 tons, representing a CAGR of approximately 26.4% as compared to approximately 125,000 tons in 2001. It is estimated that demand for aluminum extrusion products in the PRC transportation industry will increase to approximately 747,000 tons in 2010, representing a CAGR of approximately 13.6% compared to approximately 510,000 tons in 2007.

Railways and Metropolitan Railways

According to the MOR, China's total railway network operating length was approximately 78,000 kilometers as of the end of 2007, making it the longest in Asia and the third longest in the world. However, this network is still not sufficient to meet the demands placed on it given the size of the population, the scale and growth of the economy of the PRC and the popularity of railway transportation as a medium of transport.

To address the lagging investment in the railway industry in recent years, the PRC government announced the Eleventh Five-year Plan in 2006, which included an aggressive investment and expansion plan for railways in the PRC. The plan calls for a total investment of approximately RMB1.25 trillion to develop the PRC railway network and to purchase railway-related equipment in the period between 2006 and 2010, which is almost four times the corresponding amount budgeted under the Tenth Five-year Plan. According to a spokesman of the MOR, by October 2008, the total amount of investment in the PRC railway network approved by the State Council of the PRC has reached RMB2.0 trillion, of which over RMB1.2 trillion is related to investment in projects under construction. The MOR estimates that the total amount of investment in the PRC railway network will reach RMB5.0 trillion by 2020.

The following charts set forth certain historical data relating to the PRC railway industry and certain estimates based on the Eleventh Five-year Plan and the Mid- to Long-term Railway Network Development Plan.



Operating Length of Railways in PRC



Source: China Statistics Bureau, MOR

Construction of metropolitan railways has become a vital solution for public transportation problems arising from urbanization, an increased population and economic growth in many major cities in the PRC. In 2007, twelve cities in the PRC had a metropolitan railway system with a total length of approximately 791 kilometers. It is estimated that approximately 55 new lines with an estimated investment of approximately RMB500 billion will be constructed in the next five to ten years, bringing the total operating length of metropolitan railway lines to approximately 1,700 kilometers by 2010.

Automobiles

According to the China Automotive Industry Association, China was the world's second largest automobile market in 2007 in terms of sales volume, ranking behind the United States, and the world's third largest automobile market in the same year in terms of production volume, ranking behind the United States and Japan.

The strong economic growth of China and the accompanying increase in fixed asset investment, improved road transportation infrastructure and the enhancement of consumer purchasing power have brought about rapid growth in the PRC automobile market in the past five years. According to the China Automotive Industry Association, China's total vehicle ownership grew at a CAGR of approximately 12.4%, from approximately 10.4 million units in 1995 to approximately 42.3 million units in 2007. We believe that the PRC automobile market will continue to grow in line with the PRC economy.

Aviation

China's aviation transportation market is one of the fastest growing and largest in the world. To cope with the high growth of air traffic, according to the Civil Aviation Administration of China (中國民用航空局), China will need additional new commercial aircrafts which are expected to make it the second largest aviation transportation market in the world.

According to the Eleventh Five Year Plan, passenger traffic of Chinese airlines measured in passenger-time is expected to continue to increase at an average annual rate of 14.5%, while freight traffic of Chinese airlines measured in tons is expected to grow at an average annual rate of 13% for the period from 2005 to 2010. As a result, the PRC government plans to establish China as a global supplier to the international aircraft manufacturing industry and has approved an investment of RMB50 billion to produce jumbo jets. To prepare for manufacturing jumbo jets, China has worked actively with international aviation companies to manufacture aircraft parts and to build up assembly lines locally.

Shipping

China is now the third largest vessel producing nation in the world. The Chinese shipbuilding industry was stagnant up until the mid-1990s; however since that time, there has been a large increase in both production capacity and output. In 2001, China delivered 108 vessels of approximately 2.5 million DWT. By 2007, China's production output had reached approximately 18.9 million DWT.

It is the Chinese government's stated aim to become the biggest shipbuilding nation in the world. According to the Development Policy for China's Shipbuilding Industry approved by the State Council on August 16, 2006, China's shipbuilding industry aims to reach a production capacity of approximately 23.0 million DWT while the production output is targeted to rise to approximately 17.0 million DWT by 2010.

Aluminum Extrusion Consumption in PRC Machinery and Equipment Industry

Aluminum extrusion products are widely utilized in the machinery and equipment industry, including in the power transformation, radiator, and light industry support system facilities. The table below sets out some major applications of aluminum extrusion products in the machinery and equipment industry.

Sector	Applications					
Petroleum and chemical equipment	Containers; heat exchangers; condensers; petroleum and natural gas pipelines; drill pipes; oil tanks; petroleum and gas detection systems; chemical equipment					
Machinery equipment Electric and communication equipment	Assemble lines; Machine tools Frames; Wave-guild pipes Padiators: Tube buses: Outer casings					
	Radiators, rube buses, Outer Casings					

In 2007, the PRC machinery and equipment industry consumed approximately 605,000 tons, representing a CAGR of approximately 37.4%, as compared to approximately 90,000 tons of aluminum extrusion products in 2001. It is estimated that consumption of aluminum extrusion products in the PRC machinery and equipment segment will increase to approximately 782,000 tons in 2010, representing a CAGR of approximately 8.9% as compared to approximately 605,000 tons in 2007.

Aluminum Extrusion Consumption in the PRC Construction Industry

The construction industry is the largest user of aluminum extrusion products in China. Aluminum extrusion products are predominately used in manufacturing window frames, door frames and curtain walls of buildings. Aluminum extrusion consumption in the PRC construction industry has experienced strong growth in recent years. In 2007, the construction segment consumed approximately 4.1 million tons, representing a CAGR of approximately 21.1%, as compared to approximately 1.3 million tons in 2001.

Rapid aluminum extrusion consumption growth in the construction industry is primarily attributable to the fast-growing property market in China for the past years. Since the 1990s, the PRC property industry has continued to grow, sustained by a number of factors, including overall economic growth, a significant increase in investment in the industry, increases in the disposable income and urbanization rate of the population and the development of a mortgage lending market in China. From 2001 to 2007, per capita annual disposable income of urban households in China increased from approximately RMB6,860 to approximately RMB13,786, resulting in increased purchasing power for urban households in the PRC, and representing a CAGR of approximately 12.3%. For the first three quarters of 2008, the per capita disposable income reached approximately RMB11,865, representing a growth of 7.5% as compared to the first three quarters of 2007.

According to the China Statistics Bureau, the total real estate GFA sold in China in 2007 reached approximately 773.5 million sq.m., generating approximately RMB2,988.9 billion in sales. This was compared to approximately 224.1 million sq.m. sold in 2001 that generated approximately RMB486.3 billion in sales. These figures represent a CAGR of approximately

22.9% for GFA sold and a CAGR of approximately 35.3% for property sales revenue. However, since the fourth quarter of 2008, the real estate industry in China has been affected by the recent global economic downturn and deterioration of the global financial markets. The total real estate GFA sold in China for the 11 months ended November 30, 2008 was approximately 491.5 million sq.m., generating approximately RMB1,926.1 billion in sales. These figures represent a decrease of 18.3% for GFA sold and a decrease of 19.8% for property sales revenue as compared to the 11 months ended November 30, 2007.

Aluminum extrusion products have a number of significant advantages which make them preferable to alternatives such as plastics, steel, glass, and other materials in the construction industry. According to the China Construction Metal Structure Association, approximately 51% of door frames and window frames manufactured in China were made from aluminum extrusion products in 2007. With the PRC government's policy of promoting the construction of energy-efficient buildings and other structures in China, it is expected that demand for high-energy saving and strong heat insulation aluminum extrusion products will grow strongly.

In 2007, the construction industry consumed approximately 4.1 million tons of aluminum extrusion products, representing a CAGR of approximately 21.1% as compared to approximately 1.3 million tons in 2001.

It is estimated that aluminum extrusion consumption in the PRC construction industry will grow steadily to approximately 5.2 million tons in 2010, representing a CAGR of approximately 8.4% compared to approximately 4.1 million tons in 2007.

The chart below sets out the historical and forecast aluminum extrusion consumption in the PRC construction industry for the period between 2001 and 2010.



Aluminum extrusion consumption in the PRC construction industry, 2001-2010E

Source: Sunlight Metal

China's Aluminum Extrusion Production

('000 tons)

China is the largest producer of aluminum extrusion products in the world, accounting for approximately 42.5% of global aluminum extrusion production in 2007. China's aluminum extrusion production reached approximately 5.7 million tons in 2007, representing a CAGR of approximately 22.2%, compared with approximately 1.7 million tons in 2001. It is estimated that aluminum extrusion production will continue to grow to approximately 6.9 million tons in 2010, representing a CAGR of approximately 6.7% between 2007 and 2010.

The chart below sets out the historical and projected production volume of aluminum extrusion products in China for the period between 2001 and 2010.



China's aluminum extrusion production, 2001-2010E

Source: CRU

As China's manufacturing industry has become more technologically sophisticated and increased its usage of aluminum extrusion products, the production of industrial aluminum extrusion products significantly increased during the period between 2001 and 2007.

The charts below set out a breakdown of aluminum extrusion production in China by product category in 2001, 2007 and 2010.



China aluminum extrusion production by product in 2001, 2007 and 2010E

Source: Sunlight Metal

The PRC aluminum extrusion industry is highly fragmented and fiercely price-competitive. There are a large number of aluminum extrusion products manufacturers scattered around China, in which the Pearl River Delta, the Yangtze Delta and the Loop-Bohai Region are the major aluminum production areas. By the end of 2007, there were approximately 670 aluminum extrusion products manufacturers in China, of which approximately 550 enterprises had obtained permits for the production of both construction and industrial aluminum extrusion products. Most of the domestic aluminum extrusion products manufacturers have small-scale operations that produce low-end extrusion products based on simple designs. Only approximately 15 aluminum extrusion products manufacturers in China have an annual production capacity of over 100,000 tons.

The table below sets out the top 10 leading aluminum extrusion products manufacturers in China based on their respective production volume in 2007.

Top 10 leading aluminum extrusion products manufacturers in China in 2007 in terms of production volume

		Production capacity	Produ ('	ction volume 000 tpy)	}	No. of
Ranking	Company	in 2007 ('000 tpy)	Year 2005	Year 2006	Year 2007	extrusion presses
1	Zhongwang PRC	. 505	214	244	303	64
2	Asia Aluminum Holdings Limited ⁽¹⁾	. 360	90	142	244	40
3	Guangdong Haomei Aluminum Co. Ltd	. 150	26	89	135	42
4	Shandong Nanshan Aluminum Co. Ltd	. 150	64	77	112	40
5	Guangdong Fenglu Aluminum Industry					
	Co. Ltd	. 200	64	105	102	50
6	Shandong Conglin Group Co. Ltd	. 100	55	80	93	18
7	Xingfa Aluminium Holdings Limited ⁽²⁾	. 113	63	79	92	39
8	Jiangyin Xinyu Decoration Material Co. Ltd.	. 130	45	80	90	25
9 10	Fujian Minfa Aluminum INC	. 90	30	41	86	20
	Factory Co. Ltd.	. 90	42	70	84	18

Source: China Nonferrous Metals Industry Association and Sunlight Metal

Notes:

- (1) Asia Aluminum Holdings Limited had an annual production capacity of 150,000 tons for the fiscal year ended June 30, 2005.
- (2) Xingfa Aluminium Holdings Limited had an annual production capacity of 80,500 tons and 99,000 tons in the fiscal years ended December 31, 2005 and 2006, respectively.

Compared to developed countries, such as the United States, Japan and Germany, the production facilities used by Chinese aluminum extrusion products manufacturers are generally less technologically sophisticated. By the end of 2007, there were approximately 3,099 aluminum extrusion presses operated in China. The table below sets out the number of aluminum extrusion presses installed in China by 2007.

Aluminum extrusion presses installed in China by 2007

Capability	Number of extrusion presses (units)
≥100MN	3
>80MN	7
>50MN	19
30MN-50MN	30
10MN-30MN	1,120
<10MN	1,920

Source: Sunlight Metal

During the period from 2005 to 2007, Chinese aluminum extrusion products manufacturers made substantial investments in developing large aluminum extrusion presses, including 75MN, 80MN, 100MN, and 125MN oil-propelled horizontal extrusion presses. In September 2007, a 125MN oil-driven dual action extrusion press was installed in our facilities and commenced trial production. This 125MN oil-driven dual action extrusion presses in the world, able largest of its kind in China and one of the most advanced extrusion presses in the world, able to produce large section aluminum extrusion products up to one meter in length of diagonal line. Furthermore, according to Sunlight Metal, our production yields of 2008 were above industry average compared to those of other aluminum extrusion products manufacturers in China.

In addition, Chinese aluminum extrusion products manufacturers have imported machinery and equipment from overseas to develop production technologies including surface finishing, molding, smelting and age treatment.

Export and Import

The export of aluminum extrusion products by PRC-based manufacturers has increased significantly from approximately 74,300 tons in 2001 to approximately 701,000 tons in 2007, representing a CAGR of approximately 45.4%, while the import of aluminum extrusion into the PRC increased from approximately 72,900 tons in 2001 to approximately 126,200 tons in 2007, representing a CAGR of approximately 9.6%. China is the largest net exporter of aluminum products in the world.



Export and import of aluminum extrusion products in China, 2001-2007

Source: CRU

For the purpose of restricting energy-intensive industries and attaining a favorable trade balance, the Chinese government has cancelled the export rebate on some low value-added aluminum extrusion products. Exports of nonferrous metal raw products, including electrolytic aluminum, have been subject to customs duty at the rate of 15% since November 1, 2006.

PRICES OF PRIMARY ALUMINUM

The price of primary aluminum has experienced an upward trend between 2001 and 2007. The spot price of primary aluminum on the LME has increased from approximately US\$1,447 per ton to approximately US\$2,641 per ton from 2001 to 2007, representing a CAGR of approximately 10.5%. The spot price of primary aluminum on the SHFE has increased from approximately RMB14,341 per ton to approximately RMB19,580 per ton from 2001 to 2007, representing a CAGR of approximately 5.3%.

	2001	2002	2003	2004	2005	2006	2007	2008
LME (US\$/ton) Average ⁽¹⁾	1,447	1,350	1,433	1,719	1,900	2,570	2,641	2,576
SHFE (RMB/ton) Average ⁽²⁾	14,341	13,555	14,591	16,244	16,710	20,240	19,580	17,345

Prices of primary aluminum on LME and SHFE

Source: Bloomberg; SHFE

Notes:

(1) This average represents the arithmetic average of daily prices for the years indicated.

(2) This average represents the arithmetic average of monthly weighted average prices (including VAT) for the years indicated.

Domestic primary aluminum prices in 2007 displayed two major movements. During the first three quarters of 2007, primary aluminum prices (including VAT) fluctuated between RMB19,000 and RMB21,000 per ton. Compared to the LME, domestic primary aluminum prices remained at high levels for an additional two months, which made the international aluminum market relatively cheap, attracting a certain amount of imported aluminum. Coupled with this effect, production capacity expanded during the second half of the year, driving domestic primary aluminum prices significantly down in October 2007. Since then, prices fluctuated within the range of RMB17,500 per ton to RMB18,500 per ton during the fourth quarter of 2007, leading to a lower average price for 2007, as compared to 2006.

Despite the occurrence of an earthquake in Sichuan, snow storms and an increase in the price of electricity, the domestic primary aluminum prices in the first half of 2008 remained low when compared to 2007 as a result of the strong domestic supply of primary aluminum. This is beneficial to the export of aluminum extrusion products.

The recent global financial downturn has adversely affected the world economies, and both the global and domestic primary aluminum prices have decreased significantly since September 2008. The monthly average global primary aluminum prices decreased from approximately US\$2,500 per ton in September 2008 to approximately US\$1,500 per ton in December 2008. The monthly average domestic primary aluminum price also decreased from approximately RMB17,000 per ton in September 2008 to approximately RMB12,000 per ton in December 2008. Both the global and domestic primary aluminum prices for 2008 were lower than those for 2007.