We have commissioned AME Mineral Economics (Hong Kong) Limited ("AME") and the Chinese Iron & Steel Research Institute Group ("CISRIG") to provide independent assessments of the manganese market for the preparation of this section. Certain information and statistics set out in this section and elsewhere in this prospectus relating to the global and Chinese manganese industry are derived from various government official publications or are estimates provided by AME and CISRIG based on such publications and other materials. No independent verification has been carried out on such information and statistics. Reasonable care has been exercised by the Directors in the exercise of extracting and repeating such information and statistics. Our Company, the Joint Sponsors, the Underwriters, their respective directors and advisers or any other party involved in the Global Offering make no representation as to the accuracy of such information and statistics, which may be inaccurate, incomplete, out-of-date or inconsistent with each other or with other information.

INTRODUCTION TO MANGANESE

Manganese is a hard and brittle gray-white metal and is one of the most widely used and versatile chemical elements in the world. Manganese is the fourth most consumed element in the world, after iron, aluminum and copper. Manganese ore deposits are sedimentary in origin, and sedimentary deposits are the main commercial sources of manganese. Manganese ore occurs in a wide variety of mineral compositions, principally varying blends of manganese oxides and hydroxides or manganese-bearing carbonate. All types of manganese ore require processing prior to sale.

Manganese ore is typically divided into three grade categories, defined by their manganese content: high grade (>44% Mn), medium grade (>30% Mn and <44% Mn) and low grade (<30% Mn). Low grade manganese ore requires improvement for commercial use, whereas high grade manganese ore usually requires crushing and screening without going through beneficiation to be in concentrate form. High grade manganese ore is produced principally in Australia, South Africa and Gabon, whereas low grade manganese ore is produced primarily in China, Ukraine and India.

Manganese is an essential ingredient in the manufacturing of steel, which consumed approximately 90% of the manganese produced globally in 2009. Manganese removes impurities such as sulfur and oxygen in the steel manufacturing process and optimizes the physical properties of steel by improving its strength, hardness and abrasion resistance. Manganese also improves rolling and forging qualities and the weldability of steel. As there are no ready-made alternatives to manganese, its use in the steel industry is expected to continue.

According to the CISRIG Report, China is the world's largest producer of a number of manganese processed products, such as silicomanganese alloy, high carbon manganese ferroalloy, electrolytic manganese metal, electrolytic manganese dioxide and manganese sulphate. China's demand for manganese ore, which has traditionally been sourced from domestically mined ore and imported manganese ore, has been rising continuously over the past decade. Prior to 2003, 70% of the manganese ore supply in China was accounted for by domestic mines. Since 2003, the rapid development of the iron and steel industry has significantly increased domestic Chinese demand for manganese alloys, resulting in a change in the supply dynamics in China. With domestic Chinese sources of manganese ore unable to meet ferroalloy demand, China began importing substantial amounts of high grade manganese ore to meet this demand, and has become increasingly dependent on foreign manganese ore supply.

It is estimated that approximately 90% of the global manganese ore produced each year is consumed in ferroalloy production. There are three main ferromanganese alloy categories, namely high carbon

ferromanganese, silicomanganese alloy and refined ferromanganese. The majority of the manganese used in steel manufacturing is in the form of ferromanganese alloys. With the exception of Japan, where steelmakers have developed the direct use of manganese ores, most of the manganese ore used by the steel industry is processed into metallic alloy forms.

Manganese is also used for the production of chemicals and specialist metallurgical products, which consumes the remaining 10% of manganese ore produced each year. These segments include the manufacture of electrolytic manganese dioxide, lithium manganese oxide, electrolytic manganese metal and manganese sulfate. The key non-metallurgical uses of manganese are batteries and agricultural feed and fungicides.

OVERVIEW OF GLOBAL MANGANESE ORE INDUSTRY

A large proportion of global manganese ore reserves are located in a small number of countries, including Ukraine, South Africa, Australia, India, Gabon and China. AME estimates that Gabon and China have approximately 52 Mt and 40 Mt of manganese ore reserves (metal content), respectively, constituting 9.6% and 7.4%, respectively, of the world's total manganese ore reserves. The following table sets forth estimated manganese ore reserves (metal content) by country.

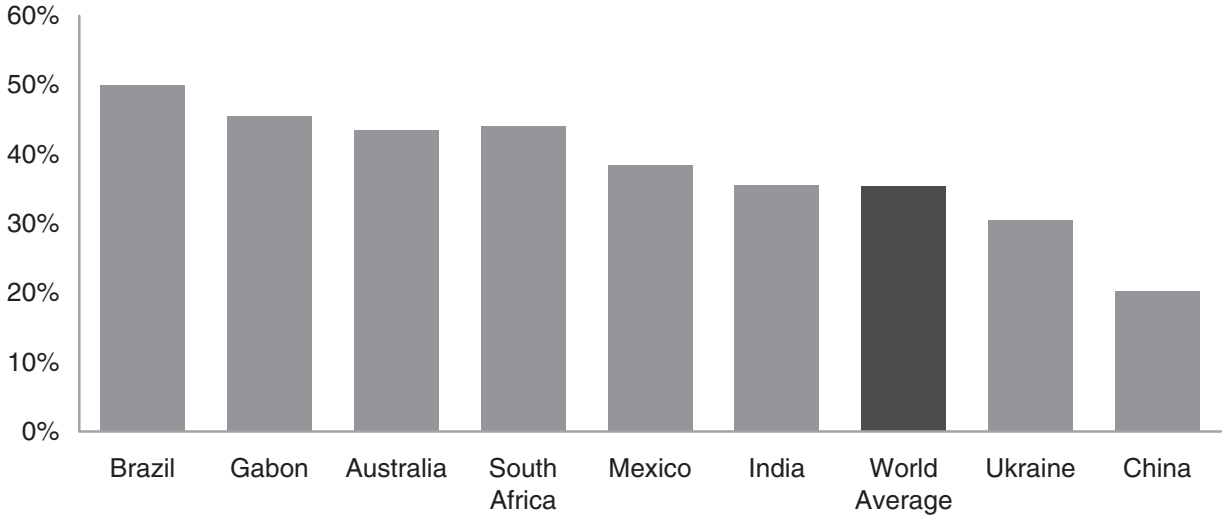
Table 1: Estimated manganese ore reserves (metal content) by country

Country	Reserves (Mt)	% of Total
Ukraine	140	25.9%
South Africa	130	24.1%
Australia	87	16.1%
India	56	10.4%
Gabon	52	9.6%
China	40	7.4%
Brazil	29	5.4%
Mexico	4	0.7%
Other	2	0.4%
Total	**540**	**100%**

Source: AME Report

Globally, manganese ore content typically ranges from 35% to 54%. AME expects world average manganese ore grades to return to an increasing trend as new higher grade projects come online and brownfield expansion projects increase production. The following figure sets forth average implied manganese ore grades by country between 2003 and 2009.

Figure 1: Estimated average manganese ore grade by country, 2003-2009



Source: AME Report

Global production of manganese ore was around 31 Mt in 2009, with production growing at a CAGR of approximately 3.4% between 2003 and 2009. In 2009, the primary countries mining manganese ore were China, Australia, South Africa, India, Gabon, Brazil and Ukraine, which in aggregate produced more than 80% of the world's total. In 2009, global manganese production was approximately 9.7 Mt (metal content).

The following table sets forth estimated manganese ore production throughout the world by various mines.

Table 2: Estimated manganese ore production by mine, 2005-2009 ('000 tonnes)

Company	Mine/Enterprise	Country	2005	2006	2007	2008	2009
OM Holdings	Bootu Creek	Australia	—	243	516	673	981
BHP Billiton	GEMCO	Australia	3,048	3,141	3,485	3,316	2,327
CML (Private)	Woodie Woodie	Australia	749	895	851	823	1,143
Hancock Prospecting	Nicholas Down	Australia	—	—	—	—	—
Total Australia			**3,830**	**4,549**	**5,265**	**4,812**	**4,451**
Vale	Azul	Brazil	2,236	1,692	945	2,003	1,382
Vale	Urucum	Brazil	389	362	277	246	169
Vale	Morro da Mina	Brazil	300	188	111	135	105
Vale	Bahia	Brazil	100	—	—	—	—
Other	Various	Brazil	175	886	533	266	544
Total Brazil			**3,200**	**3,128**	**1,866**	**2,650**	**2,200**
China	Various	China	7,500	8,000	8,000	8,500	10,000
Eramet	Moanda	Gabon	2,900	3,000	3,300	3,250	2,000
Private	Zestafon	Georgia	252	329	325	325	370
Ghana Manganese Company	Nsuta	Ghana	**1,715**	**1,659**	**1,089**	**1,167**	**600**
Government of India	MOIL	India	885	1,002	1,286	1,223	1,200
Orissa	Barbil	India	670	496	530	713	536
TATA Steel	Various	India	231	274	95	175	175
Other India	Various	India	378	139	438	591	389
Total India			**2,164**	**1,911**	**2,349**	**2,702**	**2,300**
ENRC	Various	Kazakhstan	2,200	2,200	2,382	2,289	2,252
Other Kazakhstan	Various	Kazakhstan	33	331	100	100	215
Total Kazakhstan			**2,233**	**2,531**	**2,482**	**2,389**	**2,467**
Grupo Ferro Minero (Minera Autlan)	Various	Mexico	350	336	401	421	304
BHP Billiton	Samancor	South Africa	2,332	2,512	2,544	3,443	1,599
Assmang	Nchwaning, Gloria, Black Rock	South Africa	1,616	2,150	2,715	3,568	2,443
Total South Africa			**4,612**	**5,213**	**5,341**	**6,807**	**3,923**
Marganetsky	Various	Ukraine	1,280	1,000	1,000	1,000	1,000
Other Ukraine	Various	Ukraine	946	1,245	1,390	975	127
Total Ukraine			**2,226**	**2,245**	**2,390**	**1,975**	**1,127**
Other	Various	Various	419	384	510	653	1,195
Total Global Production			**31,357**	**33,282**	**33,317**	**34,510**	**30,937**

Source: AME Report

Due largely to the global financial crisis and its impact on the steel industry, manganese ore production in 2009 fell sharply at South African and Australian mines, down 42% and 8% year-on-year respectively. Despite this, Chinese manganese production increased 18% year-on-year in 2009 as the Chinese domestic steel industry strengthened, with estimated crude steel production up 16% year-on-year. The following table sets forth estimated manganese ore production and corresponding manganese content for the major manganese ore producing countries between 2006 and 2009.

Table 3: Estimated historical manganese ore production and manganese content

	Ore Mined (Mt)				Manganese content (Mt)			
	2006	2007	2008	2009	2006	2007	2008	2009
China	8.0	8.0	8.5	10.0	1.6	2.0	2.2	2.4
Australia	4.5	5.3	4.8	4.5	2.2	2.5	2.3	1.6
South Africa	5.2	5.3	6.8	3.9	2.3	2.6	2.9	1.3
India	1.9	2.3	2.7	2.3	0.8	0.9	1.0	1.0
Brazil	3.1	1.9	1.7	2.2	1.4	0.9	1.4	1.0
Gabon	3.0	3.3	3.3	2.2	1.4	1.5	1.6	0.8
Ukraine	2.2	2.4	2.0	1.1	0.8	0.6	0.5	0.3
Others	5.2	4.8	4.8	4.7	1.5	1.5	1.5	1.3
Total	33.3	33.3	34.5	30.9	11.9	12.6	13.3	9.7

Source: AME Report

AME considers that the manganese market is currently close to a balanced position. In 2010 and 2011, AME predicts that there will be new sources of manganese ore supply, with a number of large-scale manganese ore projects scheduled to come into production in the near term. These projects are primarily in South Africa and Australia, including BHP Billiton/Anglo American's Samancor expansion, United Manganese of Kalahari's Renova project, and Hancock Prospecting's Nicholas Downs project in Australia. AME notes that some manganese ore projects are being developed by private companies providing limited or incomplete information about their project size, status and cost estimates. AME predicts that the producers will not flood the market with new supplies because of the relatively high levels concentration in the manganese ore industry. In addition, given the underlying market demand for manganese ore expected to be maintained at the current level under the prevailing outlook for steel production, the new sources of manganese ore supply are expected to enter the market in an orderly way to meet the existing market demand. Therefore, AME predicts that the manganese market will remain close to a balanced position in 2010 and 2011.

China manganese ore industry

China is estimated to have approximately 40 Mt of manganese ore reserves (metal content), constituting approximately 7.4% of the world's total manganese ore reserves. Within China, Guangxi, Hunan and Guizhou provinces are the three provinces with the largest manganese ore reserves, with 34.2%, 26.4% and 10.7% of the country's total manganese ore reserves, respectively.

In 2009, the average manganese grade produced in China was estimated at around 20-25%. Despite the lower grades of Chinese manganese ores, AME expects China to remain a significant producer due to Chinese producers possessing a freight cost advantage over higher grade imported manganese ores.

According to the CISRIG Report, there are over 600 state-owned, rural and private manganese mines in China, most of which are small mines with underground mining operations. Currently, there are only a few mines in China with open-pit operations, which generally have lower operating

costs than underground operations. As a result, production costs in China are generally higher than that for international manganese mines. Open-pit mines include Guangxi Daxin Mine, Tiandeng Mine and Fujian Liancheng Manganese Mine. In recent years, over 80% of domestic Chinese manganese ore production was from small or medium-sized local mines and private mines. Only 25 mines have production exceeding 0.1 Mt.

In 2009, China produced approximately 10 Mt of manganese ore, achieving a 11.2% production CAGR from 2004 to 2009. In recent years, while production growth of manganese ore was relatively flat or falling for most manganese producing countries, China emerged as a major producer of manganese ore, representing approximately 32.3% of global production in 2009. This recent increase in manganese production in China was mainly attributed to the substantial increase in Chinese demand for steel. China's demand for manganese ore currently exceeds its domestic supply, and in 2009 China imported an estimated 9.6 Mt of manganese ore. Based on CITIC Dameng Mining's production and CISRIG's estimates, CITIC Dameng Mining produced 9.9% of total manganese ore produced in China in 2009.

According to CISRIG, CITIC Dameng Mining is the seventh largest manganese producer by manganese content in the world and the largest manganese producer by manganese content in China.

Manganese Ore Production in 2009 — Global

	Mn Ore produced	Average Grade	Contained Mn	Percentage of global production
	Mt	(%)	Mt	(%)
BHP Billiton	7.1	46.0%	3.3	34.0%
Assmang	2.2	46.0%	1.0	10.2%
Eramet Comilog	2.0	48.0%	1.0	9.9%
Vale	1.7	44.0%	0.7	7.5%
Privat Group	1.6	43.0%	0.7	6.9%
OM Holdings	0.6	40.0%	0.3	2.7%
CITIC Dameng Mining	1.1	21.4%	0.2	2.5%
World Total	30.9	31.2%	9.7	100.0%

Source: CISRIG Report

Manganese Ore Production in 2009 — China

	Mn Ore produced	Average Grade	Contained Mn	Percentage of PRC production
	'000 tonnes	(%)	'000 tonnes	(%)
CITIC Dameng Mining	1,109	21.4%	237.4	9.9%
Yunnan Wenshan Dounan Manganese Company Limited (云南文山斗南 錳業股份有限公司)	350.0	24.0%	84.0	3.5%
Hubei Changyang Hongxin Industrial Group Company Limited (湖北长阳宏信实业集团有限公司)	400.0	18.0%	72.0	3.0%
Shanxi Liuqiu County Manganese Company Limited (山西省靈丘縣錳業有限 責任公司)	135.0	24.0%	32.4	1.4%
Yunnan Heqing Manganese Company Limited (雲南鶴慶錳業有限責任公司)	80.0	40.0%	32.0	1.3%
Chongqing Xiushan County Xinxin Manganese Company Limited (重慶秀山縣 欣鑫錳業有限公司)	130.0	23.0%	29.9	1.2%
Chongqing Laoshangou Manganese Company Limited (重慶老山溝錳業有限責 任公司)	155.0	19.0%	29.5	1.2%
Guizhou Zunyi Huixing Ferroalloy Company Limited (貴州遵義滙興鐵合金有限公司)	135.0	20.0%	27.0	1.1%
Hunan Huaheng Gengtai Mining Company Limited (湖南花垣縣亘泰礦業有限公司)	150.0	18.0%	27.0	1.1%
Guizhou Songtao Fanjing Hill Manganese Mine (貴州松桃梵淨山錳礦)	150.0	18.0%	27.0	1.1%
Fujian Liancheng Manganese Mine (福建省連城錳礦)	80.0	29.0%	23.2	1.0%
PRC Total[1]	10,000.0	24.0%	2,400.0	100.0%

Source: CISRIG Report

(1) According to CISRIG, there are over 600 manganese mining enterprises in China in total and as a result the Chinese market is fragmented.

OVERVIEW OF MANGANESE PROCESSED PRODUCTS

Processed manganese products encompass derivatives of manganese ore, including electrolytic manganese metal, electrolytic manganese dioxide and ferromanganese alloys, as well as various chemicals and compounds including lithium manganese dioxide. Processed manganese products are used in a wide variety of industries, ranging from steel-making, the primary industry demanding processed manganese products, to alloy hardeners, electronics, batteries, animal feed and agricultural fungicides. According to the CISRIG Report, China is the world's largest producer of silicomanganese alloy, high carbon ferrochromium, EMM, EMD, manganese sulphate and other down-stream manganese products.

The table below shows the capacity and production in China from 2007-2009 for CITIC Dameng Mining's major downstream products.

	China					
	Production (Mt)			Capacity (Mt)		
Product	**2007**	**2008**	**2009**	**2007**	**2008**	**2009**
Silicomanganese	4.4	4.6	4.8	8.3	8.0	8.0
High carbon Ferrochromium	1.3	1.5	1.3	1.8	1.8	2.0
EMM	1.0	1.1	1.3	1.6	1.9	2.1

Source: CISRIG Report

According to the CISRIG Report, at present 90% of Chinese manganese ferroalloy producers are not vertically integrated and only possess downstream production facilities, consisting primarily of manganese alloy and EMM downstream production facilities. CITIC Dameng Mining is among the rare 10% of Chinese manganese ferroalloy producers that also own manganese mines. As China's manganese resources are gradually depleted, the percentage of companies owning upstream mines is expected to further decline. Moreover, to meet their raw material requirements, non-integrated downstream Chinese producers will be increasingly dependent on imported manganese ore or will need to resort to acquiring overseas manganese ore deposits.

Electrolytic Manganese Metal ("EMM")

Electrolytic manganese metal is a key input for adding strength and abrasion resistance to steel, aluminum and other products. It is used for the control of sulphur and to assist in phosphorous removal in specialty steel production. In addition to its applications in ferrous alloys, it is used in non-ferrous alloys as a hardener for aluminum, magnesium, copper, nickel and zinc alloys and in particular, in the production of special steel and high performance stainless steel. Less common uses of EMM include electronics, chemicals and welding. New hydro-metallurgical leach process technology is being developed to produce EMM and electrolytic manganese dioxide from manganese oxide ore and from ore with lower manganese content as well from lower grade tailings. Some manganese ores can be processed and refined to produce EMM of greater than 99% purity.

China dominates the production and supply of EMM globally, with over 95% market share estimated in 2010. Domestic consumption in China has been growing in recent years. It is estimated that Chinese EMM domestic consumption will outgrow the export market due to the wide use of 200 series stainless steel in China, which uses a relatively high proportion of manganese. Stainless steels containing manganese increased from an approximate 10% global market share in 2006 to an estimated 12% global market share in 2009.

According to the CISRIG Report, as a result of the advancement of processing technology, the Chinese EMM industry has achieved rapid development over the past decade. Chinese EMM production capacity increased from only approximately 140,000t in 2000 to approximately 2,100,000t in 2009.

According to the CISRIG Report, in 2000, there were approximately 50 EMM manufacturers in China. By the first half of 2010, the number of EMM manufacturers had reached 185, with 33 new EMM manufacturers entering the sector in 2009 alone. Currently there are only eight companies with annual capacity of at least 40,000 tonnes. Domestic EMM players mainly consist of private enterprises, most of which have small production scales. The larger suppliers include: CITIC Dameng Mining, NingXia Tianyuan, Hubei Changyang Hongxin, Hunan Tianxiong Group, Guizhou Songtao Sanhe, Changsha Jinrui New Material, Hunan Jinxu and Chongqing Wuling. Among these EMM manufacturers, CITIC Dameng Mining is the largest EMM producer in terms of capacity, with approximately 101,000 tonnes per annum. Based on CITIC Dameng Mining's production and CISRIG's estimates for China, CITIC Dameng Mining produced 5.7% of total EMM produced in China in 2009.

Electrolytic Manganese Metal Capacity and Production in 2009 — China

(Units: '000 tonnes)

Company	Capacity	% Total	Production	Percentage of PRC Production
CITIC Dameng Mining	101.0	4.8%	73.1	5.7%
Ningxia Tianyuan Manganese Company Limited (寧夏天元錳業有限公司)	72.0	3.4%	58.0	4.5%
Hubei Changyang Hongxin Industrial Group Company Limited (湖北长阳宏信实业集团有限公司)	70.0	3.3%	42.0	3.3%
Hunan Tianxiong Group (湖南天雄集团)	53.0	2.5%	38.0	2.9%
Guizhou Songtao Sanhe Manganese Company Limited (貴州省松桃三和錳業有限責任公司)	50.0	2.4%	32.0	2.5%
Changsha Jinrui New Material Science and Technology Company Limited (长沙金瑞新材料科技股份有限公司)	45.0	2.1%	31.5	2.4%
Hunan Jinxu Metallurgical and Chemical Group (湖南金旭冶化集团)	40.0	1.9%	31.0	2.4%
Chongqing Wuling Manganese Company Limited (重慶武陵錳業有限公司)	35.0	1.7%	28.0	2.2%
Western Mineral Company Limited (西部礦業股份有限公司)	30.0	1.4%	24.9	1.9%
Xinwei Manganese Company Limited (新巍錳業有限責任公司)	40.0	1.4%	24.8	1.9%

The following table sets forth China's estimated EMM production for the years indicated.

Table 4: Estimated China EMM production

	1990	1995	2000	2005	2006	2007	2008	2009	2010 1H
No. of companies	40	60	50	156	151	175	190	188	185
Capacity (tonnes)	50,000	100,000	140,000	1,040,000	1,190,000	1,570,000	1,880,000	2,100,000	2,150,000
Production (tonnes)	16,400	63,200	123,000	566,400	730,200	1,024,000	1,138,400	1,290,000	657,000
Export volume (tonnes)	9,000	50,200	92,900	271,800	310,200	274,400	309,200	154,600	112,000
Domestic demand (tonnes)	7,400	13,000	30,300	274,600	422,400	709,600	820,700	1,131,400	545,000

Source: CISRIG Report

According to the CISRIG Report, of the current 185 EMM producers, an estimated 124 manufacturers had capacities of less than 10,000 tonnes. Under the revised guidelines issued by NDRC, a new entrant to the PRC EMM industry must have a production capacity of at least 10,000 tonnes per annum for each of its production lines and a total capacity of 30,000 tonnes per annum. Existing producers are also required to have the minimum production capacity of 4,000 tonnes per annum for each of its production lines or face capacity elimination. NDRC has also tightened the electricity and water consumption limits for EMM productions to promote the efficient consumption of energy and environmental protection.

Ferromanganese Alloy

Ferromanganese alloys are estimated to account for the vast majority of the use of manganese ore. The three main ferromanganese alloys are:

- Silicomanganese ("SiMn"): Typically contains 10 – 35% silicon, 57 – 75% manganese, and 0.1 – 3.5% carbon, and is primarily produced in submerged arc furnaces. SiMn is mainly used as a compound steel manufacturing deoxidization agent and an alloying agent to produce steel. SiMn is commonly used in the production of steel long products, critical components in the construction industry.
- High carbon ferromanganese ("HC FeMn"): Typically contains 70 – 82% manganese and more than 8% carbon, and can be produced in blast furnaces or in electric furnaces. It is primarily used in the production of normal steel and high-carbon steel.
- Refined ferromanganese ("Ref FeMn"): Typically contains 75 – 85% manganese, less than 2% carbon, and up to 2% silicon. Also referred to as medium carbon or low carbon ferromanganese, Ref FeMn is used in the manufacturing of stainless steel, heat resistant steel and electric welding electrodes.

SiMn is the most produced manganese ferroalloy, accounting for more than half of global production. After SiMn, HC FeMn and Ref FeMn are the next most produced manganese ferroalloys.

Following the steep drop in demand in 2009, global demand for ferromanganese, which is tied to steel demand, is expected to grow at around 12% in 2010 and nearly 5% in 2011. The steel industry and related industries are expected to remain the key drivers for ferromanganese demand. AME expects steel consumption to continue to grow in line with the global economy.

According to the CISRIG Report, China's ferroalloy and ferromanganese alloy industry has developed very rapidly. China has become the largest ferroalloy producer and exporter in the world. Currently there are nearly 1,800 ferroalloy producers in China with annual production capacity of more than 26 Mt of ferroalloy. Among these ferroalloy producers, there are approximately 700 silicomanganese producers with annual production capacity of approximately 8 Mt, located primarily in Guangxi, Guizhou, Sichuan, Hunan, Yunnan, Inner Mongolia, Shanxi and Henan, where abundant manganese ore and power resources exist. Based on CITIC Dameng Mining's production and CISRIG's estimates for China, CITIC Dameng Mining produced 1.2% of total silicomanganese alloy produced in China in 2009.

According to the CISRIG Report, Chinese silicomanganese production has grown steadily from approximately 1.8 Mt in 2003 to approximately 4.8 Mt in 2009 while demand has increased at a faster rate from approximately 1.3 Mt in 2003 to approximately 4.8 Mt in 2009. The growth in silicomanganese demand has been driven by the strong growth in the Chinese steel industry. As a result, net export of silicomanganese has decreased from approximately 0.49 Mt in 2003 to just approximately 0.04 Mt in 2009.

Table 5: 2003-2009 Silicomanganese Production of China

Year	2003	2004	2005	2006	2007	2008	2009
Production (Mt)	1.80	2.60	3.00	3.60	4.35	4.60	4.80
Imports	0.01	0.01	0.01	0.01	0.03	0.16	0.08
Exports	0.50	0.69	0.38	0.52	0.84	0.74	0.12
Implied Demand (Mt)	1.31	1.92	2.63	3.09	3.54	4.02	4.77

Source: CISRIG Report

According to the CISRIG Report, according to the relevant PRC industrial policies, blast furnaces employed by new entrants into the ferromanganese industry must be of a size not less than 300 cubic meters and electric arc furnaces employed by new entrants into the silicomanganese industry must be of a capacity of over 25,000KVA (excepting in mid west China where more supportive policies allow for a minimum capacity of 12,500KVA). According to the CISRIG Report, this translates into a minimum annual production capacity of approximately 70ktpa for a new ferromanganese entrant and approximately 40ktpa (20ktpa for mid west China) for a new silicomanganese entrant. Theoretically, furnaces used for steel production may be switched for ferromanganese production as the applicable minimum size for a furnace employed to produce ferromanganese alloy is smaller than that for steel production. However, PRC regulations and policies may not allow steel producers facing capacity elimination to switch to the manufacture of ferromanganese alloy. The PRC government has also compiled lists of outdated existing production facilities and furnaces that will be shut down in the near future based on its industrial policies. Such policies will impact approximately 755 ferroalloy producers and eliminate approximately 4 Mt of outdated ferroalloy production capacity, including approximately 1.3 Mt of outdated silicomanganese production capacity if fully carried out. Applicable PRC regulations and policies have also imposed heightened energy consumption and environmental protection criteria.

Natural Discharge Manganese Dioxide ("NMD")

Natural discharge manganese dioxide occurs naturally in manganese ore which can be found primarily in Gabon, Greece and Mexico. It is primarily used in the production of dry cell batteries. It is often processed to remove its impurities or blended with synthetic manganese dioxide to improve battery performance. Its major use is in the production of electro-chemical batteries.

Electrolytic Manganese Dioxide ("EMD")

Electrolytic manganese dioxide is an alternative to NMD, and it is free of the impurities contained in NMD. EMD is primarily used in batteries, where manganese dioxide is used in the cathode and zinc is used in the anode. The inclusion of manganese improves shelf life and enhances energy storage. EMD is used in preference to NMD where high performance cells are required. EMD is produced through extracting manganese from the ore or mineral into an aqueous solution and subsequently recovering the manganese in the form of EMD. Global EMD production is estimated to exceed 0.4 Mt per annum, and China is the world's leading EMD producer. Some large domestic producers have reported continued growth despite the global slowdown. In response to the Chinese government's drive to improve efficiency across the steel and industrial metals sector, the domestic industry continues to consolidate.

Lithium Manganese Oxide ("LMO")

Lithium manganese oxide is a newly developed material for use as a cathode in rechargeable, low capacity battery cells. It is produced via the synthesis of manganese oxide compounds and lithium salts. LMO is seen as a substitute for the currently used lithium cobalt oxide in the lithium ion battery market. LMO offers a high voltage, low cost product, with minimal health and environmental impacts when compared to some other cathode materials in the market.

Manganese Sulfate and Chemicals

Manganese sulfate is used in the production of animal feed, where it supplies the soluble manganese that is required in animals' metabolism and bone formation. Manganese sulfate is produced through the extraction of manganese from the ore or mineral into aqueous solution. Subsequently, manganese is recovered in the form of manganese sulfate. Manganese-ethylene bisdithiocarbamate is

used in the production of agricultural fungicides for use in crop and cereal diseases and in the treatment of downy mildew in vines, scab in fruit trees and diseases that impact peanuts and bananas.

According to the CISRIG Report, due to the small size and nature of the manganese sulfate market, a list of the largest producers is not available. However, CISRIG believes that CITIC Dameng Mining is one of the major manganese sulfate producers in the world with approximately 6% of global capacity in 2009.

Ferrochromium

Chromium ore, or chromite, is a complex mineral that occurs as a chromium spinel and contains magnesium, iron, aluminum and chromium. According to the AME Report, approximately 95% of the world's chromite production is smelted into ferrochromium for use in the production of stainless steel, steel and other alloys. Ferrochromium is commonly used as an alloying agent in steel production in regard to tool steel, stainless steel and bearing steel. The remaining 5% of the world's chromite production is used in non-metallurgical areas such as chemicals, refractory use and foundry sands. The increasing use of stainless steel, particularly in Chinese and other Asian markets, will be a key driver of ferrochromium demand in the coming years. Stainless steel is typically a more premium product, and over the long term its demand is correlated with income. Historically, stainless steel has exhibited more volatile demand trends than normal steel.

According to the CISRIG Report, despite China's lack of domestic chromium ore resources and heavy reliance on imports, China remains an important ferrochromium producer and exporter. In 2007, global production of ferrochromium was approximately 7.6 Mt, of which 46% came from South Africa and 14% from each of China and Kazakhstan.

According to the CISRIG Report, currently there are over 100 ferrochromium manufacturers in China with a total production capacity of approximately 2.3 Mt, including approximately 1.8 Mt of high carbon ferrochromium, approximately 0.4 Mt of refined low or medium carbon ferrochromium and approximately 0.1 Mt of silicon chromium. These enterprises generally have a small production scale and a wide geographical spread. The demand for ferrochromium has been growing due to the growing stainless steel industry. The relatively low proportion of stainless steel scrap in China relative to developed nations has further driven China's demand for high carbon ferrochromium for use in the smelting process for stainless steel. In 2009, China's demand for high carbon ferrochromium reached approximately 2.7 Mt. With the continued development of China's stainless steel industry, demand for ferrochrome in China is expected to continue to increase despite the country's having to rely completely on imported chromium ore.

According to the CISRIG Report, from 2004 to 2009 China's high carbon ferrochrome production grew at 20% per year, reaching approximately 1.0 Mt in 2006 and peaking at approximately 1.5 Mt in 2008. In 2009, as a result of substantial high carbon ferrochrome imports and the continuing impact of the global financial crisis, China's high carbon ferrochrome production was adversely effected, resulting in a 13.2% decrease in production to approximately 1.3 Mt. Based on CITIC Dameng Mining's production and CISRIG's estimates for China, CITIC Dameng Mining produced 3.2% of total high carbon ferrochromium produced in China in 2009.

According to the CISRIG Report, high carbon ferrochromium demand has increased at a significant pace, growing at a rate of 30% per annum from 2004 to 2009, and has outstripped production in every year since 2004, with the shortfall being supplied via imports. Demand fell from approximately 2.3 Mt in 2007 to approximately 2.1 Mt in 2008 as a result of the slowing of

economic activity and a reduction in stainless steel production due to the global financial crisis, before rebounding to approximately 2.7 Mt in 2009.

Table 6: China's high carbon ferrochromium production and demand for 2000 – 2010 1H

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 1H
Production (Mt)	0.23	0.20	0.23	0.42	0.53	0.72	1.00	1.30	1.51	1.31	0.94
Demand (Mt)	0.11	0.14	0.26	0.43	0.75	0.91	1.40	2.34	2.05	2.73	1.80

Source: CISRIG Report

OVERVIEW OF THE STEEL INDUSTRY

Global Steel Market

As approximately 90% of the manganese produced globally in 2009 was used in the production of steel, demand for manganese is closely correlated to the production of steel, which in turn is closely correlated to industrial production growth and GDP growth. Steel production is the overwhelming source of demand for ferromanganese alloys and outside of steel production, manganese ferroalloys have few applications. Demand for EMM is also linked to steelalloy (especially manganese containing stainless steel) production.

The following table sets forth estimated historical and forecast global crude steel production by country.

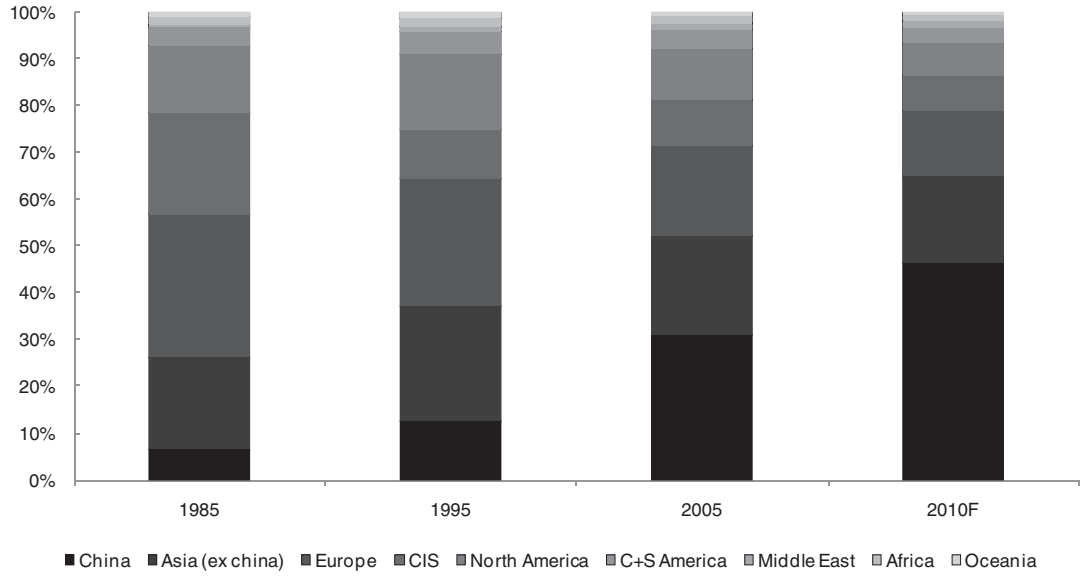
Table 7: Estimated crude steel production (Mt)

	2002	2003	2004	2005	2006	2007	2008	2009	2010 F	2011 F
China	182	222	280	356	423	489	500	568	637	665
Japan	108	111	113	112	116	120	119	88	105	108
United States	92	94	100	95	99	98	91	58	67	72
Russia	60	61	66	66	71	72	69	80	64	67
Korea, South	45	46	48	48	48	52	54	49	52	54
India	29	32	33	46	49	53	55	57	59	62
Germany	45	45	46	45	47	49	46	33	37	39
Ukraine	34	37	39	39	41	43	37	30	32	33
Brazil	30	31	33	32	31	34	34	27	32	34
Italy	26	27	29	29	32	32	31	20	22	23
Other	254	264	284	279	293	304	291	229	260	273
World	904	970	1,069	1,146	1,250	1,346	1,327	1,219	1,367	1,430
World % ch p.a.	6.30%	7.3%	10.2%	7.3%	9.0%	7.7%	-1.4%	-8.1%	12.1%	4.6%
China as % of world	20.1%	22.9%	26.2%	31.1%	33.8%	36.3%	37.7%	46.6%	46.6%	46.5%

Source: AME Report

As demand for manganese is closely correlated to steel production, steel producing countries generally have associated levels of demand for manganese. The following figure shows the change in regional steel production since 1985, with Asia, dominated by China, becoming one of the largest steel producing regions. AME estimates that Asia will account for approximately 70% of global crude steel production in 2010. The following figure sets forth the estimated share of global crude steel production for certain regions for the years indicated.

Figure 2: Estimated regional share of crude steel production



Source: AME Report

AME estimates that world finished steel apparent consumption was approximately 1,100 Mt in 2009, down from approximately 1,200 Mt in 2008, due to the slowing of economic activity following the global financial crisis. AME forecasts steel consumption to increase by approximately 10% in 2010 and approximately 5% in 2011. However, 2010 growth rates are likely to be amplified by the low base in 2009.

China Steel Market

China dominates global steel production, consumption and trade. From 2003 to 2009, Chinese production grew at a CAGR of 17%. China's share of global crude steel production has grown significantly from an estimated 23% in 2003 to 47% in 2009. China's steel output is projected to increase by 12% in 2010 to approximately 637 Mt before moderating to 4% in 2011 at approximately 665 Mt, and the country's share of global steel production is projected to remain around current levels for the next two years.

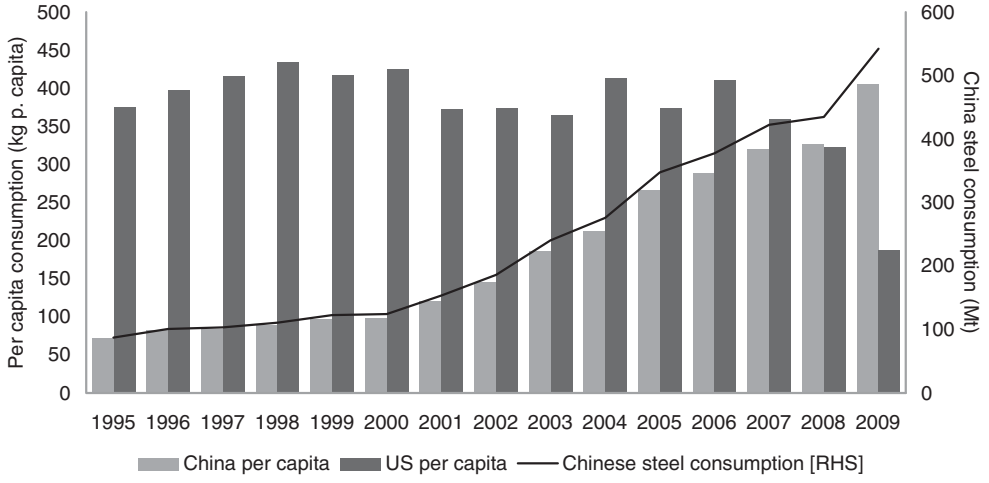
In the years leading up to 2007, the Chinese steel industry experienced significant capacity growth despite the fact that the PRC government had issued policy to modernize and rationalize the industry. Many mills, faced with outright closure, have either replaced their small blast furnaces with larger furnaces in order to meet the PRC's National Development and Reform Commission's steel industry development policy or merged to form larger entities to avoid elimination. In April 2010, the Chinese Ministry of Industry and Information Technology, or MIIT, announced a new policy to eliminate older and smaller capacity. Under this policy all blast furnaces below 400 cubic

meters and electric arc furnaces below 30 tonnes would be forced to close before the end of 2011. The purpose of the policies is to optimize the structure of the PRC steel sector, instead of restricting its development. AME estimates that China's steel production will be largely concentrated on the east coast, where approximately 55% of China's crude steel production was concentrated in 2009.

China's growth in steel production has been a result of the country's rapid industrialization and urbanization, which has driven China's total apparent steel consumption to increase by approximately 125% from approximately 240 Mt in 2003 to approximately 540 Mt in 2009. In 2009, China's estimated steel consumption per capita was twice that of the U.S. The following figure compares estimated China and US per capital steel consumption and China apparent steel demand, for the years indicated.

According to the World Steel Association, despite the new policy announced by MIIT, Chinese crude steel production in 2010 year-to-date remained high as compared to previous years. June 2010 China crude steel production was approximately 53.8 Mt, approximately 2.4 Mt less than the 2010 year-to-date high month of May 2010, compared to the average monthly crude steel production of approximately 41.0 Mt, approximately 41.5 Mt and approximately 47.3 Mt in 2007, 2008 and 2009, respectively. MIIT's policy has impacted older and smaller producers that mainly produce crude steel. According to the China Iron & Steel Association, crude steel production in China decreased in July and August 2010 though is still higher than previous years. The reduction in crude steel production and robust demand has led to the recent increase in Chinese steel prices.

Figure 3: Estimated China and US per capita steel consumption and China apparent steel demand

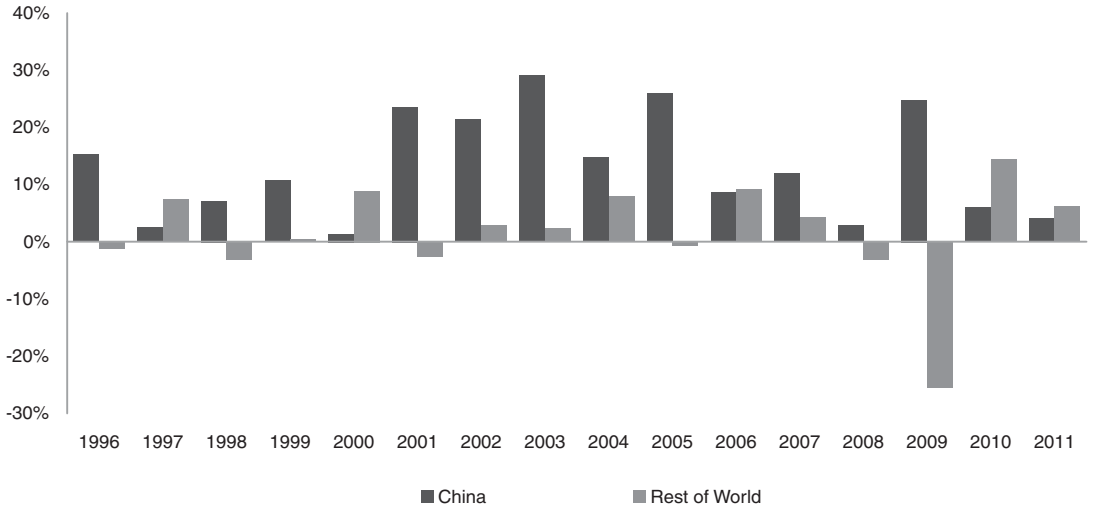


Source: AME Report

AME forecasts that China's apparent finished steel consumption will increase moderately by approximately 6% in 2010 and 4% in 2011. This is lower than AME's forecast Chinese crude steel production growth of approximately 12% in 2010 and approximately 4% in 2011. Therefore, exports are expected to make up a larger share of production.

The following figure sets forth estimated and forecasted finished steel apparent consumption for China and the rest of the world, on a per annum growth basis.

Figure 4: Estimated finished steel apparent consumption — China and rest of world



Source: AME Report

Three prominent drivers of the country's steel demand are construction, transportation and consumer durables. In particular, the construction of new offices, factories, shops and apartments is expected to account for a large share of steel consumption over the forecast period and beyond.

Global and China Stainless Steel Market

Stainless steel is a type of specialty steel of which there are a number of varieties. Stainless steels with high proportions of manganese are referred to as '200 series' stainless steels, where as austenitic or nickel containing stainless steels are generally known as '300 series' stainless steels. Our EMM products are mainly used for the production of 200 series stainless steel, which has grown in popularity in recent years. The rapidly increasing price of nickel saw some manufactures substitute 200 series stainless steel for more expensive nickel containing variants. Despite the fall in nickel prices from their 2008 peak, 200 series stainless steel maintains a price advantage over 300 series. AME expects that 200 series market share of stainless steel will remain structurally higher over the forecast period.

According to the CISRIG Report, globally, Asia is the largest stainless steel producing region, producing approximately 15.01 million tonnes in 2008, approximately 58.0% of global production. Of this, China produced approximately 6.94 million tonnes of stainless steel, approximately 26.8% of global production and 46.2% of Asian production. In 2009, global production of stainless steel decreased by 5.3% to approximately 25.00 million tonnes. However, China increased stainless steel production to approximately 8.88 million tonnes, a 28.0% increase versus 2008, accounting for 35.5% of global production. The production of stainless steel requires a large amount of ferrochromium and accounts for over 80% of the demand for ferrochromium. In China, the production of stainless steel requires a greater proportion of high carbon ferrochromium than in developed countries due to China's lower usage of stainless steel scrap. The growing stainless steel sector in China has resulted in greater demand for ferrochromium and domestic supply has been unable to keep pace since 2002, forcing China to rely heavily on imports to make up this shortfall.

Currently, about 90% of global electrolytic manganese metal is used for the production of steel, especially the production of 200 series stainless steel. Stainless steel manufacturers historically manufactured 300 series stainless steel which require 18% chromium and 8% nickel. In recent years, however, as the price of nickel reached record highs, the market for 300 series stainless steel declined as demand shifted towards the cheaper 200 series (which require 18% chromium, 5%-10% manganese and only 1.5%-2% nickel) and 400 series stainless steel. As a result, there was a significant increase in the consumption of ferromanganese and ferrochromium alloys. In recent years, the 200 series stainless steel industry in China has experienced dramatic growth with production of 4.0 million tonnes in 2009 making China the largest 200 series stainless steel producing country in the world.

In the steel sector, the products that consume the most manganese metal include: special manganese-containing steels (200 series stainless steel, TWIP steel, high manganese steel), high alloy steel, low alloy steel, plain carbon steel and quality carbon steel.

Producers of 200 series stainless steel make up the largest consumers of EMM in China, and are mainly located along costal areas like Fujian, Zhejiang and Guangdong Province, as well as Henan and Sichuan Province. Most of these producers are private companies. Of the non-private companies, only Lianzhong Stainless Steel and Baosteel produce 200 series stainless steel wide sheets whereas other enterprises basically produce only 200 series stainless steel narrow strip products. In 2008, private companies produced 3 million tonnes of stainless steel, of which 200 series stainless steel accounted for over 90%. In 2009, total crude steel production by the 15 largest private producers amounted to 3.4 million tonnes, an increase of 25.6% year-on-year, of which 2.6 million tonnes was 200 series stainless steel.

The 200 series stainless steel is a low-cost, economic stainless steel suitable for China's current economic situation. It reduces the consumption of relatively high-priced nickel and is cost-effective. With the development of rural markets, consumption and application of 200 series stainless steel will further increase. Therefore, this creates significant opportunities and room for the electrolytic metal manganese market to maintain significant growth. As of the end of 2009, the production capacity of electrolytic metal manganese companies in China reached 2.1 million tonnes. The government is shifting electrolytic metal manganese production capacity to regions with advantages in resources and energy. This government policy creates opportunities for CITIC Dameng Mining to expand its electrolytic metal manganese production capacity.

Stainless steel demand is correlated to higher living standards. Current stainless steel consumption per capital in China is only 4.6kg/year, much lower than the 10kg/year average of developed countries. As such, there is significant room for increased stainless steel consumption in China. Stainless steel production in China was 5.3 million tonnes in 2006, 7.2 million tonnes in 2007, 6.9 million tonnes in 2008 and 8.9 million tonnes in 2009, amounting to an annual growth rate of 19%. The PRC government also encourages and supports the development and production of specialty steel and stainless steel, which are high value added steel products, through the use of export tax rebates and policies supporting research and development. Such rapid development of the stainless steel sector clearly shows that there is significant and increasing demand for special steel and stainless steel, which will continue to drive growth for high carbon ferrochromium and electrolytic manganese metal, which are both heavily used in the production of special steel and stainless steel.

Table 8: Estimate Stainless Steel Production (Mt)

Year	2007	2008	2009	2010F	2011F	2012F	2013F	2014F	2015F
Production	7.2	6.9	8.9	9.7	9.9	10.5	10.8	10.9	11.0

Source: CISRIG

OVERVIEW OF BATTERIES SECTOR

Batteries are one of the key non-metallurgial uses of manganese. Demand for batteries can be divided between demand for non-rechargeable batteries, or primary battery demand, and demand for rechargeable batteries, or secondary battery demand. Primary batteries have much higher densities than secondary batteries and can be stored for up to 10 years. Global primary and secondary battery demand is expected to grow by around 4% per year over 2010 and 2011. Global demand growth will be fuelled by the return of more favorable economic conditions in Western markets and rising incomes in Asia. China is expected to top the global growth rates in demand for batteries in major markets and may surpass the United States as the largest battery market in the world over the medium to long term.

Sales of batteries in the industrial market are likely to be healthy. Demand for manganese in the battery sector is tied to growth in demand for consumer dry cell batteries. While the zinc-manganese battery is commonly used in the developing world, it is expected that the developing world will increasingly use alkaline batteries, as is the case in the developed world where alkaline batteries comprise the majority of market usage. Many modern alkaline batteries still contain manganese dioxide, meaning the net effect of this change on manganese dioxide demand is expected to be immaterial.

According to the CISRIG Report, the market for lithium-ion batteries and their cathode materials has developed rapidly in China and globally in recent years. Lithium-ion battery producers, such as BYD Lithium Battery Co., Ltd, China BAK Battery Inc and Tianjin Lishen Battery, have large production scales with daily output of more than 1 million batteries and product quality that is comparable to international peers. In terms of cathode materials, companies like Hunan Reshine New Material, Pulead Technology Industry and Beijing Easpring Material Technology, were the first producers to engage in research and production in China. As lithium cobalt oxide is very expensive and cobalt resources are limited, many producers and scientific research institutions have shifted research and production to lithium manganese oxide. According to statistics of lithium manganese oxide usage by battery producers, lithium-ion battery plants consumed a total of more than 10,000 tons of lithium manganese oxide in 2008, with full year production of lithium manganese oxide even reaching around 11,400 tons, of which production by Yunnan Yuxi Huilong Technology, Shenzhen Yuanyuan New Materials, Shijiazhuang Best Battery Material and Shandong Jining Wujie Technology satisfied 30% of market demand. Most of the remaining producers in China are located in Eastern China, while there are no producers located in Guangxi Province, where manganese resources are abundant. Guangxi Autonomous Region offers substantial support for deeply processed manganese products in terms of capital and land in order to make use of Guangxi's manganese resource advantage and to boost high-tech development by the new material industries. As a local leading company in the manganese sector, CITIC Dameng Mining has constructed a lithium manganese oxide production line with a capacity of 600 tonnes annually at Chongzuo Base. CITIC Dameng Mining commenced trial production in August 2010. Production capacity and actual output of lithium manganese oxide in China are shown in the following table.

2008 Production Capacity of Chinese Lithium Manganese Oxide Producers (Top 10)

Unit: tonne/year

Ranking	Producer	Announced Production Capacity	Actual Output
1	Yunnan Yuxi Huilong Technology Co., Ltd. (雲南玉溪江龍科技有限公司)	5,000	2,000
2	Shenzhen Yuanyuan New Materials Technology Co., Ltd. (深圳市源源新材料有限公司)	1,200	1,000
3	Shijiazhuang Best Battery Material Ltd. Co. (石家莊百思特電池材料有限公司)	1,000	800
4	Shandong Jining Wujie Technology Co., Ltd. (山東濟寧市無界科技股份有限公司)	1,000	500
5	Shandong Linyi Gelon New Battery Materials Co., Ltd. (山東臨沂杰能源材料有限公司)	1,000	500
6	Shandong Qingdao Qianyun Hi-Tech New Material Co., Ltd. (山東青島乾運高科新材料有限公司)	1,000	500
7	Zhejiang Yongkang Haihua New Material Co., Ltd. (浙江永康市海華新材料有限公司)	1,000	500
8	Henan Xinxiang Green New Energy Material Co., Ltd. (河南新鄉格瑞恩新能源材料股份有限公司)	1,000	400
9	Wuxi Jewel Power & Materials Co., Ltd. (江蘇無錫晶石新型能源有限公司)	1,500	400
10	Xi'an Ronghua New Material Co., Ltd. (西安榮華新材料有限公司)	600	400

Source: CISRIG Report

With progress on research over the past two years, the recycling performance and high temperature performance of lithium manganese oxide have further improved. Due to its safe nature and low cost, lithium manganese oxide is applied to various industries including mobile phone batteries, UPS power sources, golf trolleys, electric tools, excavating machines, mining lights, military flashlights and electric toys. Furthermore, with an increasing sense of environment protection and the lower costs of lithium manganese oxide batteries, lithium manganese oxide batteries will gradually replace lead acid batteries to be used for electric bikes and electric motorcycles. The broad applications of lithium manganese oxide batteries have boosted market demand for lithium manganese oxide with an extensive group of clients.

After over 10 years of research and production, relevant experts in the power battery sector have concluded that the lower energy density and conductivity of lithium iron phosphate results in a lower power density and shorter battery life (in terms of number of charging and discharging cycles) for lithium iron phosphate when compared to lithium manganese. Therefore, it has become more marketable to use lithium manganese oxide as one of the leading cathode materials in the power vehicle sector.

In terms of national policy, lithium manganese oxide is designated as the material of choice for lithium-ion power batteries in the major project of "energy saving and new energy vehicle" in the modern communication technology sector, which has been included in the "11th Five-Year Plan" (863 Plan). According to the latest circular issued by the State Security Standards Office on

February 15, all lithium batteries for mining lights must adopt lithium manganese oxide or lithium iron phosphate batteries, and must be in line with the seven security testing items stated in the latest circular.

MANGANESE MARKET OUTLOOK

In recent history the manganese industry has experienced some over-supply and excess capacity resulting from rapid growth. Surplus alloy production has tended to depress global prices and reduce the viability of production in higher cost Western economies. In times of reduced demand, some steel mills may move away from use of alloys towards converters where cheaper manganese can be used. In periods of high demand, generally the trend reverses towards greater use of refined alloys.

In the years leading up to 2008, strong growth in the developed world and rapid growth in developing countries resulted in commodity prices reaching historic highs, with high grade manganese ore prices reaching an estimate of US$14.10 per dry metric ton unit ("dmtu") in 2008. Rising commodity demand, coupled with shortages of mining equipment, consumables and labor, as well as higher energy and transport costs, increased manganese production costs during this period. Companies with significant hauling and shipping requirements were especially effected by the substantial increase in fuel and shipping prices, which directly increased transportation costs. In certain countries, royalties also apply and further increased costs for manganese miners.

The global economic downturn that started to unfold in the second half of 2008 adversely affected the steel industry and certain other industries which demand manganese products, and reduced demand in these industries caused manganese ore and manganese product prices to fall sharply in 2009. In response to falling commodity prices and the expectation of a global economic slowdown, steel and mining companies, especially those with higher cost operations, decreased output and postponed expansion plans. In addition, following the global financial crisis, conditions in credit markets limited the ability of mining companies to seek financing, with smaller companies and those with significant capital expenditure plans being most adversely effected. This has delayed the project pipeline, which AME believes will offer some support to manganese prices during the recovery. This trend has been reversing as markets have improved.

The steel industry has begun to show signs of a turnaround, with estimated global crude steel production in the first four months of 2010 having increased over 30% compared to the first four months of 2009. AME expects the steel industry, the primary industry demanding manganese products, to continue to strengthen in the remainder of 2010 and into 2011 in response to improved economic conditions, even given current market concerns.

AME forecasts continued growth in Chinese steel production and apparent steel consumption. China's steel output is projected to increase by 12% in 2010 to approximately 637 Mt before moderating to 4% in 2011 at approximately 665 Mt, and the country's share of global steel production is projected to remain around current levels for the next two years.

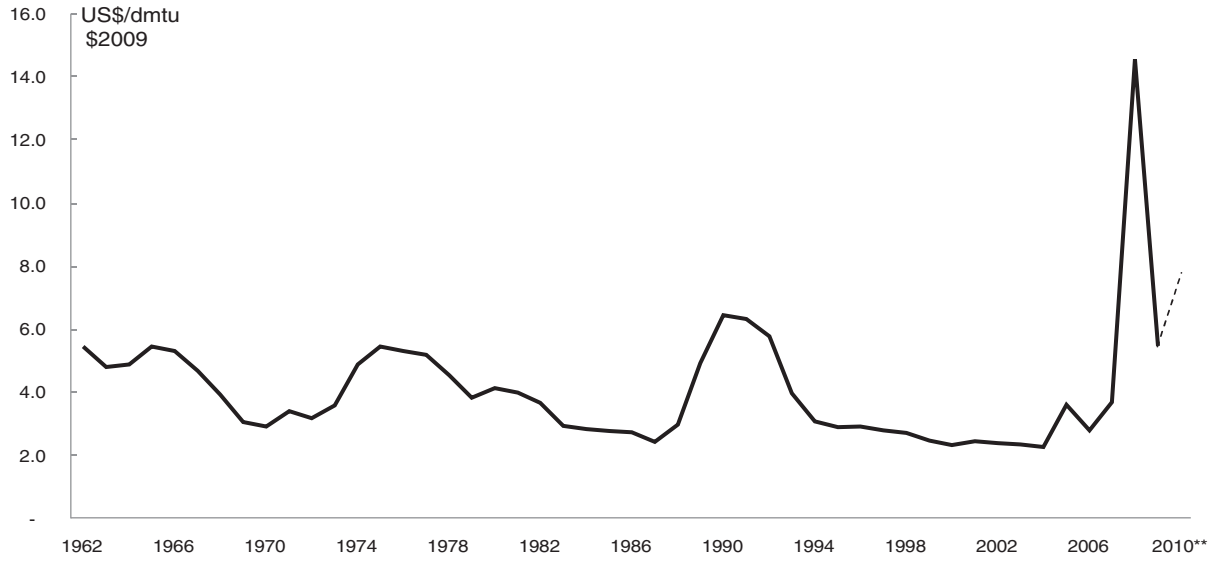
There is not sufficient information on the historical prices for manganese tetroxide, lithium manganese oxide and lithium cobalt oxide, as the market sizes for these products are relatively small. These products did not contribute revenue to our Group during the Track Record Period, and we do not expect that any of these new products will contribute material revenue to our Group in 2010 or 2011.

Manganese ore price outlook

The price of manganese ore had generally been stable for the decade ended in 2006 and 2007. In 2007, the price of manganese ore increased in both the international and Chinese markets due to an increase in demand. This increase in manganese demand was driven in part by a significant increase in the price of nickel in the international market, leading to the substitution of nickel for EMM in stainless steel production. A shortage in domestic manganese supply to satisfy domestic demand has resulted in increased manganese ore imports to China, which has contributed to the increased cost of manganese ore in China.

Unlike other non-ferrous base metals that are traded on the London Metal Exchange, manganese is not a publicly traded commodity, and thus it does not have a readily observable spot price. Manganese ore prices are often contract-based and negotiated between the buyer and seller directly with the market leaders, such as BHP Billiton, usually acting as the price-setter. The spot market is often thinly traded with very limited information available and not representative of all market forces at the same time. There are a number of sources that track the prices of various manganese-related downstream products, but such prices are based on specific product specification and markets which may not be an appropriate proxy for related product categories. Higher grade ores generally attract higher prices. The following figure illustrates the estimated historical global high-grade manganese ore prices for the periods indicated.

Figure 5: Estimated global high-grade manganese ore prices, FOB

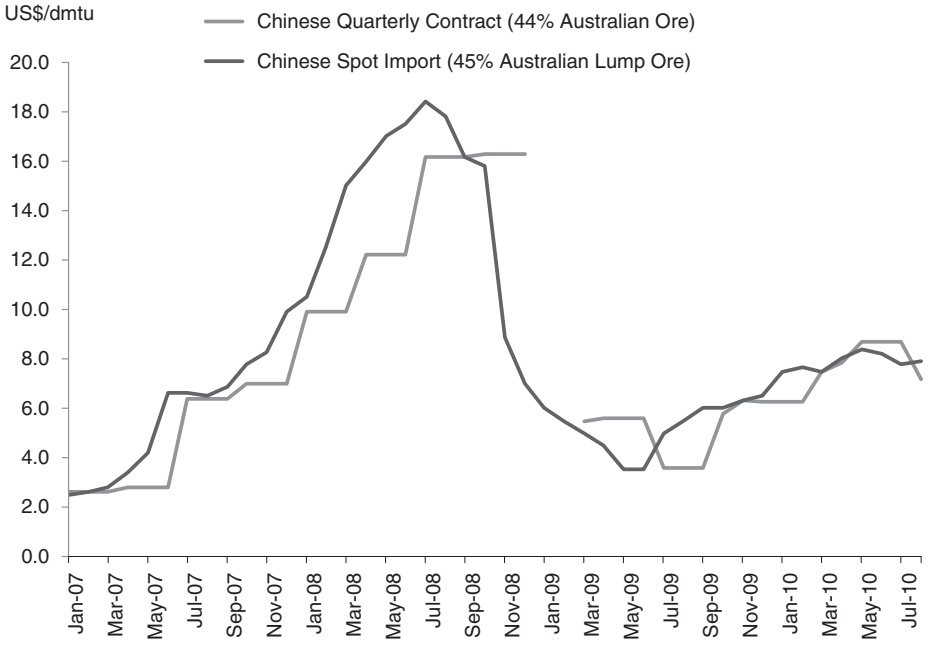


Source: AME Report
*** 2010 data is indicative as of September 2010*

AME expects that the high grade manganese ore market will remain relatively balanced over the next 18 to 24 months as demand is broadly able to meet supply. From January 2010 to September 2010, estimated price of high grade ores have averaged around US$7.50-$8.00 per dry metric ton unit and have increased by around 25% over this period. AME expects ore prices to remain around this level for the rest of the year and into 2011.

According to the CISRIG Report, China and Japan are the two main manganese ore importers in Asia. Chinese manganese imports are typically medium grade manganese ore (44-45% Mn) as well as low grade manganese ore, while Japanese manganese imports are typically high grade manganese ore (46-48% Mn), resulting in suppliers applying different pricing mechanisms to the two countries. Prior to 2008, Japanese manganese imports were priced using an annual contract price with Australia, using Australian manganese ore FOB (48% Mn) as the basis for pricing. Due to the greater volatility in market supply and demand in the Chinese market, Australian suppliers issue quarterly prices to Chinese manganese ore purchasers, primarily ferromanganese alloy smelters, which are generally based on CIF manganese ore (44% Mn). From 2008 onwards, as manganese ore price fluctuations increased, Australia shifted to a quarterly pricing system for Japan as well. The following figure compares BHP's estimated Chinese quarterly manganese ore contract price with the estimated China spot price.

Figure 6: BHP's estimated Chinese quarterly manganese ore contract price, CIF



Source: CISRIG report

Note: Due to the financial crisis in 2008, manganese ore prices experienced great volatility at the start of 2009, leading BHP Billiton to delay announcing Q1 2009 manganese ore contract prices until March 2009.

According to the CISRIG Report, as there are no tariffs for manganese ore imports into China, domestic Chinese manganese ore prices tend to follow international price trends set by market leaders, such as BHP Billiton. However, because of the differing quality of domestic Chinese manganese ore across various regions, the final pricing of manganese ore within China is determined by further negotiations between suppliers and customers.

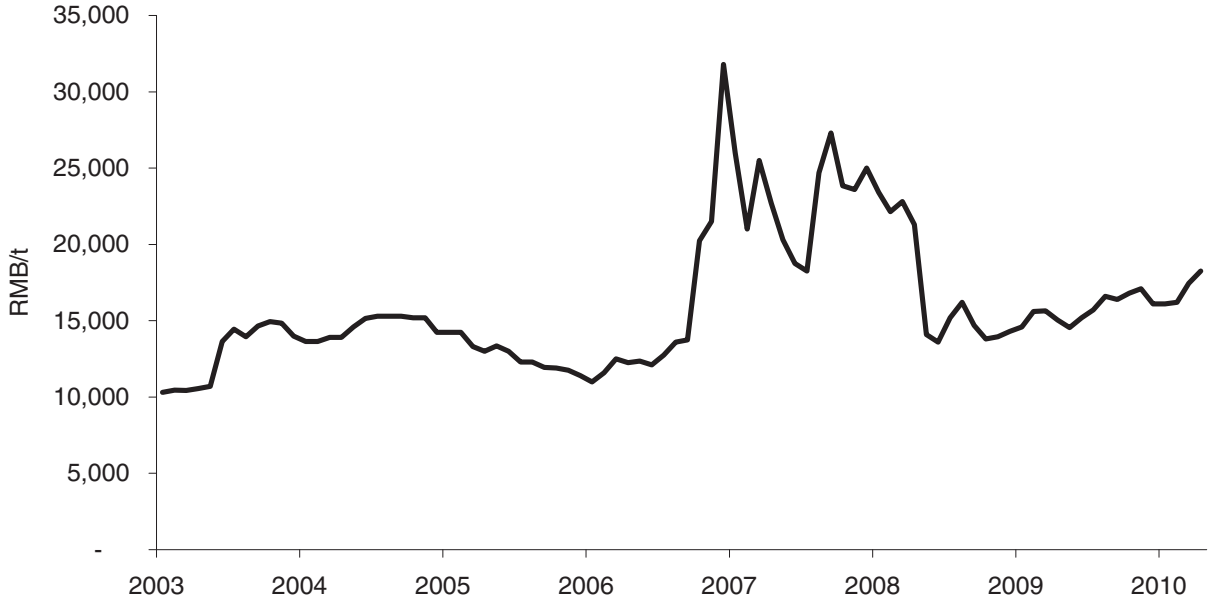
EMM price outlook

China dominates both the demand and supply of global electrolytic manganese metal. The level of electrolytic manganese metal production capacity in China, despite the government's efforts to rationalize the electrolytic manganese metal industry, is expected to remain high in the near future.

AME has identified seven Chinese electrolytic manganese metal producers flagged for capacity closure in 2009, totalling just 38,000 tonnes of capacity. These closures are part of the central government's drive to improve efficiency and reduce pollution in the steel and metals processing sector. Electrolytic manganese metal demand growth is expected to increase along with steel production growth, driven by the continued improvement in living standards in Asia, particularly China. Despite nickel prices retreating from their price levels in 2008 with the broader fall of the base metals complex, non-austenitic and electrolytic manganese metal containing stainless steel will maintain a price advantage given current nickel prices.

The following figure illustrates estimated historical manganese metal prices in China for the period indicated.

Figure 7: Estimated China domestic EMM price



Source: AME Report

Estimated EMM prices have averaged around RMB 16,500 – 17,000 per tonne in 2010 to date. The International Monetary Fund forecasts continuing global GDP growth next year, which AME expects to have a complimentary effect on the EMM price outlook.

CITIC Dameng's EMM products are mainly used for the production of 200 series stainless steel. According to AME, 200 series stainless steel has grown in popularity in China in recent years. AME expects that 200 series' market share of stainless steel will remain structurally higher over the forecast period. Moreover, EMM can also be alloyed into other metals including aluminum and copper to improve their characteristics for specific purposes. China is the world's largest market for copper and aluminum alloys and consequently, AME estimates China is the largest market for EMM demand. The underlying demand for EMM is expected to grow in 2010 and 2011 as the global economy continues to strengthen.

According to the CISRIG Report, China began imposing a 15% export tariff on EMM in November 2006, and increased the tariff to 20% at the beginning of 2008. Although exports of EMM significantly decreased due to the financial crisis in the second half of 2008, the government did not

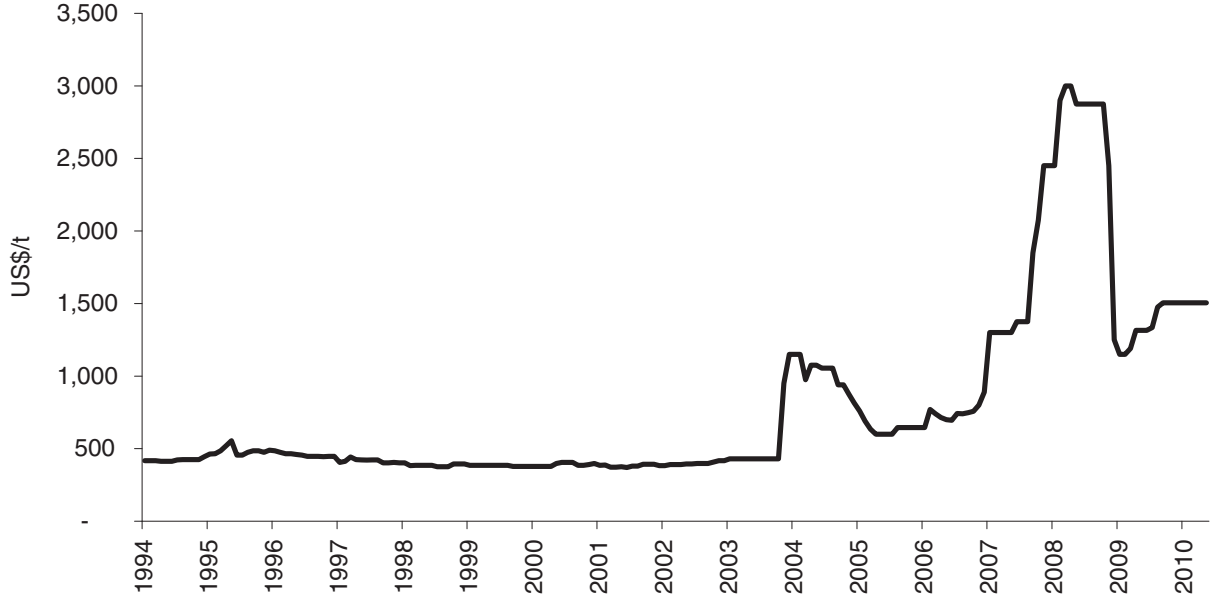
reduce the tariff and the difference between domestic Chinese and international EMM prices was primarily the result of the 20% tariff imposed by the Chinese government.

Ferromanganese price outlook

There is limited reliable information available for ferromanganese supply. This necessitates caution when estimating ferromanganese prices. Manganese ferroalloy prices reached a peak in mid-2008 and fell sharply in 2009. Between January and September 2010, price performance across different variants of ferromanganese has been varied. Estimated prices have ranged from flat growth to around 20% depending on location and alloy type.

The following figure sets forth the estimated historical price of ferromanganese (75% Mn) for the years indicated.

Figure 8: Estimated ferromanganese (75% Mn) price at main Chinese ports, FOB



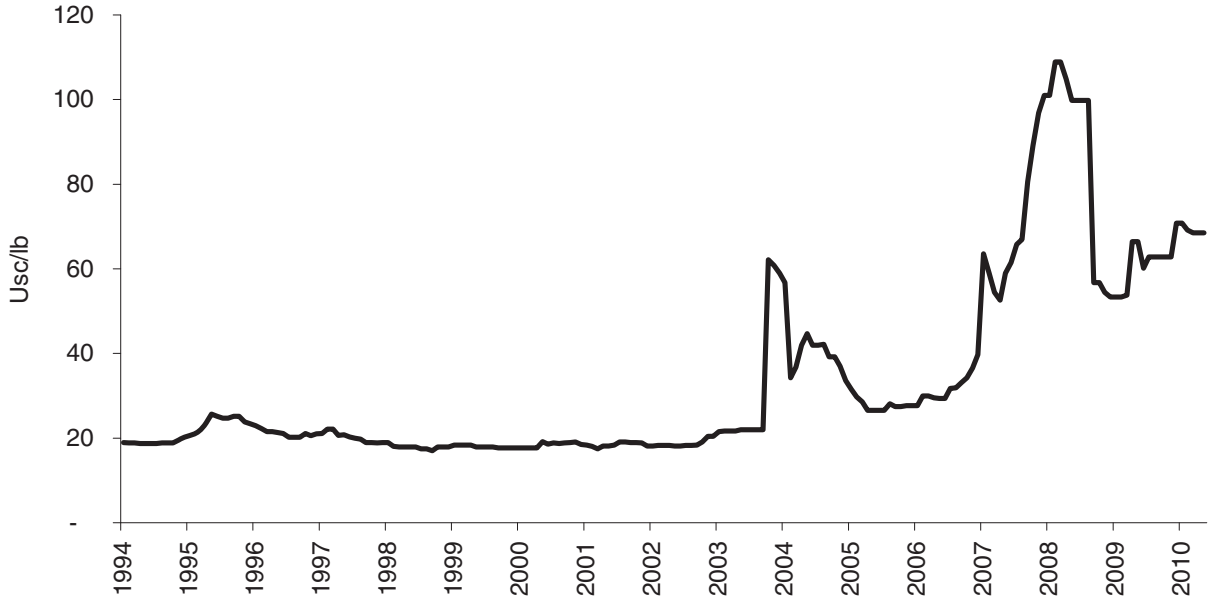
Source: AME Report

AME believes that there remains some excess capacity in ferromanganese alloy capacity, especially in China, and that this situation may hinder reasonable price growth in the short to medium term.

Silicomanganese price outlook

The following figure sets forth the estimated historical price of silicomanganese for the years indicated.

Figure 9: Estimated silicomanganese (65% Mn) price FOB, main Chinese ports



Source: AME Report

According to the CISRIG Report, Chinese silicomanganese pricing is determined using a spot pricing mechanism. Silicomanganese is commonly consumed in the production of construction steels. AME expects that the rising income levels and urbanization trends in China will support the nation's demand for construction and consumer durable at buoyant levels in 2010/2011. This will in turn support the demand for manganese alloy over the same period.

EMD price outlook

The demand for EMD is largely driven by the demand for batteries containing manganese. Increasing global living standards, particularly in Asia, are expected to result in global primary and secondary battery demand growth continuing in 2010 and 2011. For EMD demand, the most important battery segment is dry-cell batteries. The International Manganese Institute estimates that currently dry cell battery consumption is over 20 billion units a year. AME forecasts total battery demand to increase with GDP over the forecast period.

AME expects EMD demand in 2010 to be aided by Chinese government policies to increase the development and consumption of electrical consumer goods in rural areas, though such increased development and consumption may not result in higher prices for EMD. The recent increase in EMD prices in late 2009 and 2010 has encouraged producers to restart idle operations.

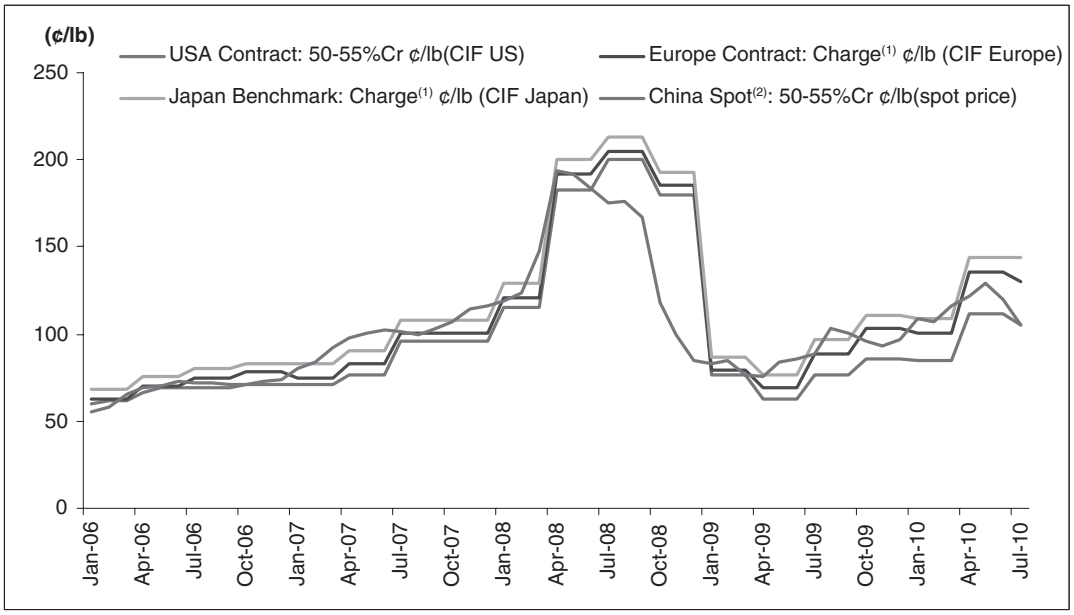
Ferrochromium price outlook

It is expected that economic growth, particularly in developing countries, will continue to be the key demand driver for stainless steel, which in turn increases demand for ferrochromium. After falling

sharply in late 2008 and early 2009, global ferrochromium prices have been recovering, showing a broad improvement globally. The International Monetary Fund forecasts continuing global GDP growth next year, which AME expects to have a complimentary effect on the ferrochromium price outlook.

According to the CISRIG Report, Chinese domestic pricing of ferrochromium utilizes a spot pricing mechanism with reference to international ferrochromium market pricing trends. Chinese domestic pricing trends have generally been aligned to the international market; however, a comparison of pricing trends and price differences between the domestic Chinese and international markets indicates that domestic Chinese prices react faster to market conditions and experience greater volatility due to its spot pricing mechanism. This is particularly apparent during periods of supply shortages and high prices, when the spot price of Chinese imports is typically higher than the quarterly contract price. China has become a major factor impacting the international ferrochromium markets, due to a sharp rise in its stainless steel output and the corresponding growth in demand for chromium and ferrochromium alloys this entails. The following figure illustrates a comparison of estimated benchmark prices of high carbon ferrochromium exported from South Africa to the US, Japan and Europe and estimated spot prices in China.

Figure 10: Comparison of estimated benchmark prices of high carbon ferrochromium exported from South Africa to the US, Japan and Europe and estimated spot prices in China from 2006-2010 (EUR/lb)



Source: CISRIG Report

Notes:

(1) "Charge" refers to furnace charge grade ferro-chrome, i.e. high carbon ferrochromium with 52% Cr content

(2) China spot is calculated based on the monthly average prevailing domestic market price for high carbon ferrochromium as offered by the largest ferrochromium producers. This price includes a value-added tax of 17% (the value-added tax was 13% prior to 2009)

FEE PAID AND ASSUMPTIONS AND PARAMETERS FOR AME REPORT

We commissioned AME to produce the AME Report, which was used for the preparation of this section of the prospectus. AME is a leading independent research house that specializes in producing

detailed analytical and strategic research on the global steel and related commodities industries and a range of other mineral and metal commodities. AME has served mining, engineering, financial and government sector clients around the world for over 40 years. We paid AME a total of US$150,000 in fees for the preparation and update of the AME Report.

In preparing the AME Report, AME gathered statistics and other data from its mining and metals databases and in-house expertise, as well as a wide range of public domain and industry data sources.

The key assumptions and parameters used in the AME Report are set forth below.

Global Economic Growth

AME assumed that the global economy will grow at a rate of 4.8% in 2010 and 4.2% in 2011. AME expects a global economic recovery to maintain moderate growth, driven by the economic growth of emerging economies.

Demand

AME regarded demand as the independent variable, which drives supply. AME's demand analysis considered individual industry sectors, such as transportation, construction, and various durable goods, and took into account changing consumer tastes, barriers to entry and substitution factors. Recent historical trends were used as guidance for making future demand projections. The growth pattern of developing countries was considered in light of other recently developed or more developed countries or regions such as Japan, Taiwan and Korea.

Supply

AME's supply analysis took into account various factors affecting suppliers as they attempt to meet demand requirements. AME also considered material flow from the majority of the world's large mines through the beneficiation process and then to buyers. AME also assessed various influences on demand, such as changes in inventory, infrastructure capacity and regulations.

Prices

AME balanced supply and demand to verify any potential shortfalls or stock pile build-ups, towards the end of providing a view on likely price movement pressures. AME's analysis on prices included an assessment of the relative negotiating power of buyers and sellers and the framework within which these negotiations are conducted.

FEE PAID AND ASSUMPTIONS AND PARAMETERS FOR CISRIG REPORT

We commissioned CISRIG to produce the CISRIG Report, which was used in the preparation of this section of the prospectus. CISRIG is China's largest comprehensive research and development organization focused on the metallurgical industry, and has provided consulting services for over 50 years to the mining industry, projects and governmental agencies. The CISRIG Report was commissioned at a cost of HK$174,495.

The statistics and other data used in the CISRIG Report were obtained from publicly available information of various sources, including China governmental statistics agencies and industry information publicized by international professional associations. Information concerning the Company was obtained from publicly available information that the Company has disclosed.

The key assumptions and parameters used in the CISRIG Report are set forth below.

Demand

CISRIG assumed that economic growth increases demand for steel, which increases demand for manganese. They assumed that China's economy will continue to grow relatively rapidly until 2015, which will increase demand for steel. CISRIG forecasted that China's production volume of crude steel in 2013 will reach a peak of approximately 660 Mt, which will result in a peak in demand for manganese ore in China, after which, the demand for manganese ore will slightly decrease. They further forecast that the stainless steel industry will witness a stable growth rate of approximately 3.6% until 2015, which will result in continued strong demand for chromium.

Supply

CISRIG forecast of manganese ore supply was based on changes in the volume of manganese ore imports, production stability, sale destination, production expansion plans of international manganese mines and China's policy change to imported manganese ore. In China chromium ore is mainly imported, and such imports largely depend on production stability, sale destination and the production expansion plans of international chromium mining companies. Based on the foregoing factors, CISRIG forecasted that domestic development of chromium ore will continue to expand.

Price

The price of manganese ore is determined primarily by its supply and demand. Due to their large market share, manganese ore suppliers have strong control over the price of manganese ore. CISRIG also considered the suppliers' stock in forecasting price trends. The price of chromium ore is determined primarily by negotiations amongst Europe and Japan and producers of South Africa, which, as a system, will continue to determine the price trend of international chromium products.