"Things gained through unjust fraud are never secure."

- Sophocles

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COMPANY: CHINA METAL RECYCLING HOLDINGS LTD | HK: 0773

INDUSTRY: Scrap Metal Recycling

#### Recommendation:

# Strong Sell

Price:

HK\$ 9.43 As of Market Close 1/25/2013

Market Cap:

HK\$ ~11 billion

Public Float:

464mm shares

Daily Volume:

5.5mm shares (Avg. 10 days)

Auditor:

Deloitte Touche Tohmatsu

Underwriters:

UBS, China Merchants

China Metal Recycling Holdings Ltd. ("<u>CMR</u>" or the "<u>Company</u>") purports to be the largest scrap metal recycling company in China. We believe that this is a lie. Publicly accessible import data from the Chinese government suggests that CMR is a blatant fraud that has deceived the market about the size of its business.

- 1. **CMR is Nowhere Near its Reported Size**. Multiple independent sources show that CMR could not be sourcing anywhere close to the volume of scrap necessary to produce its reported volume of processed metals.
  - a. **MEP Import Data Indicates Fraud**. Publicly available data from the Chinese Ministry of Environmental Protection indicates that CMR has never been legally allowed to import more than **87,500 tons of non-ferrous scrap metal in any year**, even though the Company **would have to be importing an average of ~120,000 tons of non-ferrous scrap <u>per month</u> in <b>2011-2012** (~ 1,440,000 tons per year) to produce its reported output.
  - b. **Customs Data for Copper Imports Indicates Fraud**. Similarly, in order to produce CMR's reported volume of copper, CMR would need to import ~113,000 tons of scrap copper per month, which would make it by far the largest scrap copper importer in China. Yet 2011 and 2012 customs data shows that CMR is not even in the top 10 of monthly scrap copper importers, and that Chiho-Tiande (HK: 0976), a competitor supposedly 1/5<sup>th</sup> the size of CMR (measured by sales), is listed as the top importer each month.
  - c. **All the Scrap in China**. In order to produce CMR's reported volume of processed copper, CMR would have to account for 34% of all imported scrap copper and over 50% of the domestic scrap copper market in 2012. Such a market share is not plausible.
- 2. **Sales to Top Customer Highly Suspicious**. For the Company's financials to be believed, CMR would have to account for **84% of the non-ferrous metals** supplied to its largest customer (a Guangzhou state owned enterprise) in 2011, a level of supplier concentration we find highly improbable.
- Fictitious Financials. Many of the Company's key financial and operational metrics deviate
  so significantly from other scrap metal recyclers that its reported performance defies
  credibility.
  - a. **Suspiciously Amazing Growth Rate**. CMR's revenue and EBITDA growth from 2006-2011 was more than twice its nearest competitor, even though the Company's spent less on capital expenditures than its peers and its capacity utilization was strikingly low.

# COMPANY: CHINA METAL RECYCLING HOLDINGS LTD | HK: 0773 INDUSTRY: Scrap Metal Recycling

- b. **Revenue per Employee Figures Not Credible**. CMR claims to generate \$US 11 million of revenue **per employee**, a worker productivity rate that is 10x higher than all of its major industry peers and 6x higher than the revenue per employee generated by Apple (~ \$US 2 million <u>per employee</u>), generally regarded as one of the global leaders in yield per employee. This is simply not believable.
- c. **Inexplicable Inventory Turnover**. CMR claims to turn inventory five to six times as fast as Chiho-Tiande, its closest domestic competitor.
- d. **Madoffian Return on Capital**. The consistency of CMR's return on capital through the 2008 financial crisis bears more resemblance to Bernie Madoff's fabricated returns than the returns generated by a highly cyclical scrap metal business during a commodities crash.
- 4. **Woe be the CFO**. Only six months after the Company's initial public offering, CMR's CFO abruptly <u>resigned</u> on the grounds that the board of directors failed to address concerns over potential improprieties that he brought to the attention of the audit committee and denied him access to CMR's financial records.
- 5. Chairman Cashing Out. On January 25, 2013, CMR announced that its Chairman, CEO and founder, Chun Chi Wai, entered into an agreement with a state-owned enterprise to sell 56% of his shares in the Company. When the man who knows the most about CMR cashes out of the majority of his shares, investors would be wise to heed his example. We believe that there are two possible explanations for this transaction: either the purchaser is another victim of CMR's deception, or officials at the state-owned enterprise are corrupt and thus complicit in the fraud.
- 6. Valuation. As of June 2012, CMR had HKD 5.7 billion of bank debt outstanding, the holders of which would take priority over shareholders. Because we believe that the Company has significantly overstated its sales, we doubt the authenticity of its reported receivables and inventory. The book value of the Company's property, plant and equipment is only HKD 460 million, so even after senior secured bank creditors seize CMR's fixed assets, such creditors would still be owed over HKD 5 billion! After senior secured debt holders, local Chinese unsecured creditors with priority over Hong Kong shareholders are owed roughly HKD 10 billion. The Company's heavily levered balance sheet and the scale of its deception suggest that shareholders will be left with nothing. We therefore put a price target on CMR's shares of HKD 0.00.

# Disclaimer

We are short sellers. We are biased. So are long investors. So is CMR. So are the banks that raised money for the Company. If you are invested (either long or short) in CMR, so are you. Just because we are biased does not mean that we are wrong. We, like everyone else, are entitled to our opinions and to the right to express such opinions in a public forum.

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In some cases, we publish our research opinions to the public through our blog (www.glaucusresearch.com). What we publish is our opinion, and we provide all of the facts and evidence that support and underlie our views and our investment thesis. We clearly disclose any bias that may exist due to our having a short position in the researched company. We are not registered as an investment analyst in the US or in Hong Kong, nor are we required to be. We are based in California, and we study and analyze stocks trading in markets around the world.

Often our due diligence and analysis takes many weeks, sometimes many months, depending on the volume of publicly available information, the complexity of the financial statements, and the level of analysis and modeling required to get to the truth about a company's business.

However, in some cases, conclusive evidence of fraud is so blatant that it requires little advanced level of financial or accounting acumen or sophisticated modeling to reveal the truth. We believe that China Metal Recycling ("CMR" or the "Company") is one such case.



CMR once claimed to be a small business with plausible financial metrics, a believable market share ( $\sim$ 5-6%), a reasonable percentage of the copper supply chain for its largest customer (5%) and a reported volume of scrap metal imports that was near the volume of scrap metal import quotas granted to the Company by the Chinese government.

But since it went public on the Hong Kong exchange, we believe that CMR's lies have become bigger and bigger, building upon each other until they formed an unstable tower of fabrications that is rotting from the inside. Today, the Company is deeply in debt. Today, the Company claims to import a volume of scrap metal that is ~3500% (2011) greater than it is legally permitted to import by the Chinese government. Today, CMR claims to supply 84% of the copper purchased by its largest customer, a level of supply chain concentration that defies credibility. Today, CMR's implied share of the scrap market has become so absurd that it is simply unbelievable.

We therefore believe that tomorrow, or someday soon, the SFC will halt trading of CMR's shares, the exchange will delist the Company, and the authorities will prosecute those persons at the Company who have engaged in the fraud, and possibly also bring enforcement actions against the promoters of the Company and others who have facilitated the Company's conduct, and who perhaps themselves participated in or benefited from it. Finally, we hope that the investors who have been victimized by the Company's fraud will receive restitution as a result of CMR being brought to justice.

#### CMR IS NOWHERE NEAR ITS REPORTED SIZE

Publicly available data from the Chinese Ministry of Environmental Protection and Chinese customs records suggest that CMR imports a far smaller amount of scrap metal than the Company claims. We believe this is clear evidence that CMR is exaggerating its revenues and the scale of its business.

CMR purports to be the largest scrap metal recycling company in China. The Company's revenue streams can be divided into three categories: ferrous metals (iron and steel), non-ferrous metals (mainly copper, aluminum, stainless steel) and other materials (ores, scrap plastics etc...). The sale of non-ferrous metals (~95% of which is comprised of copper²) reportedly accounts for ~80% of the Company's revenue and is the primary driver of its spectacular revenue growth.

The scrap metal recycling business is fairly straightforward. CMR purchases scrap in the form of household appliances, junk cars, old equipment and solid waste from the construction and manufacturing industries. CMR then uses heavy equipment, giant shredders and manual labor to separate the scrap into its various metal components to produce metal products that meets its customers' needs in terms of size, purity and other requirements.

In this report, we will refer to the ratio of usable metal (i.e. finished product) to raw scrap intake (i.e. the input) as the 'yield.' According to Minmetals Futures (a futures broking firm owned by China Minmetals Corporation),<sup>3</sup> the average yield for scrap imported into China is 30%. In other words, for every ten tons of scrap copper imported into China, a business like CMR strips out three tons of usable copper. The yield for businesses located in the United States such as Sims Metal is typically higher (75-90%) because most scrap originates in the United State or Europe, so companies in those markets get first pick of the high-yield scrap, whereas the low-yield scrap is generally sent to China where lower labor and energy costs make it possible to profitably recycle it.



In order to calculate the amount of raw scrap that CMR would have to purchase in order to produce its reported sales volume of processed metals, we can simply divide the Company's reported sales volume (in tons) by the assumed yield, in this case 30%. The table below shows the results of our calculations for 2006-2012.

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<sup>&</sup>lt;sup>1</sup> http://www.chinametalrecycle.com/en/

<sup>&</sup>lt;sup>2</sup> Guoyuan Securities Initiation Report, August 2010.

http://www.cmra.cn/a/jinshuqikan/zhongguoxunhuanjingji/2012-2/2012/0312/228448.html

CMR - Non-Ferrous Sales, \	Volumes and Yield	ł
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All figures are in Tons (unless otherwise noted)	2006A	2007A	2008A	2009A	2010A	2011A	1H2012A	2012 (E)†
Sales Volume - Tonnage	11,760	22,136	110,055	201,000	360,000	668,000	526,000	1,052,000
% Increase yr/yr		88%	397%	83%	79%	86%	70%	58%
Sales (HK\$ mm)	611	1,239	4,235	7,643	17,420	40,533	30,392	60,784
% Increase yr/yr		103%	242%	80%	128%	133%	61%	50%
Implied Raw Scrap Metal Purchased by CMR	39,200	73,787	366,850	670,000	1,200,000	2,226,667	1,753,333	3,506,667
Yield Assumption	30%	30%	30%	30%	30%	30%	30%	30%

<sup>\*</sup>Note: According to the Company and analysts, CMR imports roughly 50% of its non-ferrous scrap metal

CMR purportedly imports 50% of its non-ferrous scrap metal because the domestic scrap metal market is small, fragmented and insufficient to meet demand.<sup>4</sup> If we assume a yield of 30% (which is the average yield on imported scrap for Chinese recycling companies), it means that CMR would have had to import an average of ~120,000 tons per month<sup>5</sup> of non-ferrous scrap over the last two years to produce its reported amount of processed non-ferrous metal. Considering China imported a total of ~400,000 tons of non-ferrous scrap per month in 2011-2012, CMR would have had to account for over 30% of all such imports over this period. This is obviously not plausible, and we will show why in this report. <sup>6</sup>

But what makes CMR's case so unusual is that even if we make an extremely generous (and implausible) assumption in favor of the Company, and assume that CMR's yield is 90% (meaning it would have one of the highest yields of any major scrap recycler in the world), data shows that the Company is nowhere close to importing the required volume of scrap necessary to produce CMR's stated volume of processed metals. It is important to note a 90% yield assumption is patently absurd considering the low quality of scrap metal typically imported into China and the low average yield of Chinese recyclers (30%). Yet even under this extreme and generous assumption, the Company would have to import an average of ~39,000 tons of non-ferrous scrap per month<sup>7</sup> for its financials to be true. Independent data shows that CMR is nowhere close to importing even this volume of scrap.

**Yield Assumptions** 

	Yield Assumption	Reasonableness of the Assumption	CMR's Required Monthly Volume of Imported Scrap	% Implied Market Share of All Chinese Scrap Imports
Base Case	30%	Chinese Average	~120,000	30%
Extreme Case	90%	Implausible	~39,000	10%

<sup>&</sup>lt;sup>4</sup> Macquarie Equities Research Report initiating coverage on CMR, November, 2011; Deutsche Bank Market Research report, July, 2012.

<sup>7</sup> Calculation: ((668,000/0.9) + (1,052,000/0.9)) / 24) \* 0.5. Calculation ((2011 Production Volume/Assumed Yield)

+ (2012 Production Volume/Assumed Yield)) / 24 months) \* % Import. Assumes 90% yield.

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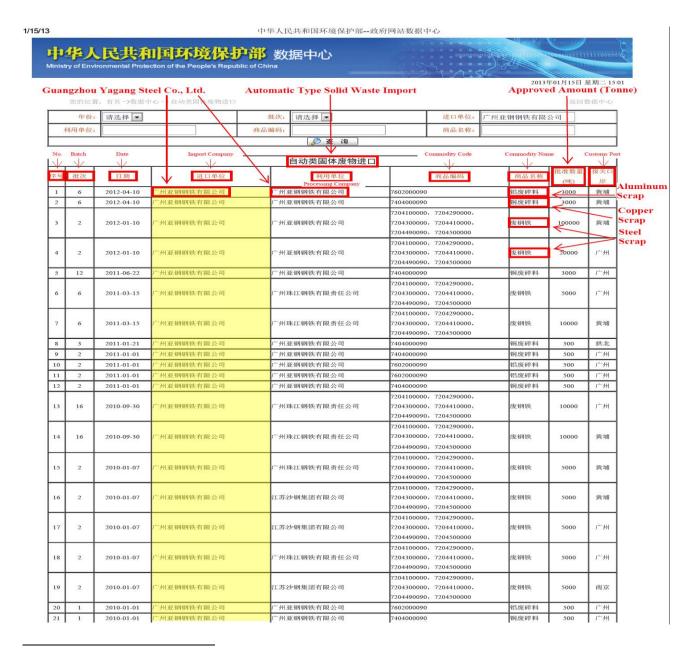
<sup>†2012</sup> Estimate is calculated by annualizing the sales of the first 6 months of 2012

<sup>&</sup>lt;sup>5</sup> Calculation: ((3,506,667 + 2,226,667) / 24) \* 0.5. Calculation ((2011 Production Volume/Assumed Yield) + (2012 Production Volume/Assumed Yield)) / 24 months) \* % Import. Assumes 30% yield.

<sup>&</sup>lt;sup>6</sup>Deutsche Bank Market Research report, July, 2012.

#### 1) Ministry of Environmental Protection

The Ministry of Environmental Protection ("<u>MEP</u>") tightly regulates scrap metal imports into China. Each year, the MEP publishes a list<sup>8</sup> of companies authorized to import non-ferrous scrap into the country. The MEP also maintains a separate public database containing the authorized import quotas for each such entity, which can be found at this <u>website</u> (<u>datacenter.mep.gov.cn</u>) and accessed by any investor or regulator. Below is a screen shot taken of the database.<sup>9</sup>



<sup>8</sup> http://www.mep.gov.cn/gkml/hbb/bgg/201201/t20120121\_222860.htm).

<sup>&</sup>lt;sup>9</sup> The MEP quota database (<u>datacenter.mep.gov.cn</u>) includes each company's quota for materials imported under the automatic licensing administration (scrap iron, steel and copper fragments) and for materials imported under the restricted licensing administration (scrap wires, appliances and electrical equipment). This distinction is explained on page 141 of CMR's prospectus.

We checked the MEP database for the import licenses of each CMR subsidiary. According to the MEP database, it appears that only the following CMR subsidiaries are permitted to import non-ferrous scrap and only in amounts not to exceed the following quotas:

**CMR - Non-Ferrous Import Quotas** 

Tonnage per Subsidiary	2006A	2007A	2008A	2009A	2010A	2011A	2012A
Guangzhou Asia Steel	79,600	10,000	26,000	28,000	18,000	5,500	12,000
Tianjin Yatong		3	:=:	4,800	4,000	22,000	55,500
Ningbo Yagang	-	-		25,000	20,000	1,500	20,000
Guangzhou Yatong	-	-	-		2,000	2,000	-
Total Non-Ferrous Import Quotas	79,600	10,000	26,000	57,800	44,000	31,000	87,500

Source: MEP data

These numbers should shock anyone familiar with the Company. According to the MEP's database of import quotas, CMR has never been legally allowed to import more than **87,500 tons of non-ferrous scrap metal in any year**, even though the Company would have to be importing an average of ~120,000 tons of non-ferrous scrap per month in 2011-2012 (and 1,440,000 tons per year) to produce its reported output.

CMR states in its Global Offering that its ability to import scrap metal is determined by the MEP's import quotas and that, as of June 3, 2009, the MEP had authorized import licenses to CMR's subsidiaries Guangzhou Asia Steel and Tianjin Yatong. <sup>10</sup> This corroborates the information found in the MEP database which lists Guangzhou Asia Steel and Tianjin Yatong as the primary importing subsidiaries in 2009 (the Ningbo Yagang facility became operational in Q3 2009 after the Company went public) and confirms that by its own admission the Company is not importing scrap metal under a different name or illegally circumventing the quotas. <sup>11</sup>

Yet since 2007, CMR import quotas are tiny compared to the volume of scrap it would have to import for its reported non-ferrous metal production to be true. The following table shows the discrepancy between the import quotas found in the MEP database and CMR's purported volume of imported non-ferrous scrap since 2006.

CMR Reported Non-Ferrous Imports - Tonnage (30% Yield Assumption)

All figures are in Tons (unless otherwise noted)	2006A	2007A	2008A	2009A	2010A	2011A	1H2012A	2012 (E)†
Implied Raw Scrap Metal Volume*	39,200	73,787	366,850	670,000	1,200,000	2,226,667	1,753,333	3,506,667
% Imported Volume (Actual and Est.)	67%	80%	44%	50%e	50%e	50%e	50%e	50%e
Implied Import Volume of Raw Scrap	26,264	58,660	160,313	335,000	600,000	1,113,333	876,667	1,753,333
Issued Import Quotas of Raw Scrap	79,600	10,000	26,000	57,800	44,000	31,000	n/a	87,500
% Reported Imports Exceed Quotas	n/a	487%	517%	480%	1264%	3491%	n/a	1904%

Source: MEP data, Company Filings

\*Calculated in the table on page 6 of this report, assuming a yield of 30%

†2012 Estimate is calculated by annualizing the performance of the first 6 months of 2012

<sup>&</sup>lt;sup>10</sup> CMR Global Offering (pg. 142) (<a href="http://www.chinametalrecycle.com/en/investor">http://www.chinametalrecycle.com/en/investor</a> Prospectus.html); also available at <a href="http://www.hkexnews.hk/listedco/listconews/SEHK/2009/0610/LTN20090610004.pdf">http://www.hkexnews.hk/listedco/listconews/SEHK/2009/0610/LTN20090610004.pdf</a>

<sup>11</sup> CMR Global Offering (pg. 40) (http://www.chinametalrecycle.com/en/investor Prospectus.html)

The data is clear. CMR cannot legally import anywhere close to the volume of non-ferrous scrap required to produce its reported volume of processed metal. Recently, it appears that the lies have gotten more egregious, as the Company's reported imports of non-ferrous scrap metals exceeded its 2011 and 2012(annualized) quotas by 3491% and 1904%, respectively.

Even making the ridiculous assumption that CMR's yield of metal to scrap is 90%, which as we discussed above is far too charitable to the Company, CMR cannot legally import even close to the required volume of scrap (as we show in the following table).

CMR Reported Non-Ferrous Imports - Tonnage (90% Yield Assumption)

All figures are in Tons (unless otherwise noted)	2006A	2007A	2008A	2009A	2010A	2011A	1H2012A	2012 (E)†
Implied Raw Scrap Metal Volume**	13,607	24,596	122,283	223,333	400,000	742,222	584,444	1,168,888
% Imported Volume (Actual and Est.)	67%	80%	44%	50%e	50%e	50%e	50%e	50%e
Implied Import Volume of Raw Scrap	9,117	19,554	53,438	111,667	200,000	371,111	292,222	584,444
Issued Import Quotas of Raw Scrap	79,600	10,000	26,000	57,800	44,000	31,000	n/a	87,500
% Reported Imports Exceed Quotas	n/a	96%	106%	93%	355%	1097%	n/a	568%

Source: MEP data, Company Filings

We are confident that the MEP database is a reliable source because we performed the same exercise for CMR's competitor, Chiho-Tiande (HK: 0976) ("Chiho-Tiande") and the quotas listed in the MEP database essentially matched the quotas stated in Chiho-Tiande's Global Offering and exceeded (instead of the other way around) the volume of scrap that Chiho-Tiande claims to import into China. We summarized the data in the table below.

#### **Chiho-Tiande MEP Import Volumes Data**

All figures are in Tons (unless otherwise noted)	2007	2008	2009
MEP Issued Import Volume License Quotas**	267,000	392,500	449,850
Stated Import Volume Quotas†	301,000	363,000	523,800
% Difference between Reported Quotas and MEP Quotas	11%	-8%	14%
Actual Import Volumes†	244,405	314,808	263,743
Actual imports as a % of MEP Quotas	92%	80%	59%

†Chiho-Tiande Global Offering: http://www.chiho-tiande.com/uploadfile/1/20100628/EWF00976.pdf - See page 160

There is little difference between Chiho-Tiande's reported quotas and its quotas listed in the MEP database, suggesting that the MEP database is a reliable source for a company's maximum import volumes. Moreover, Chiho-Tiande does not claim to import more scrap metal than it is legally allowed. Rather, it appears that Chiho-Tiande is typically importing 59-92% of its licensed amount each year. This makes sense: actual imports should not exceed import quotas.

Compare Chiho-Tiande's import data to CMR's data. CMR cannot legally import anywhere close to the volume of non-ferrous scrap that it needs to generate its reported output. We believe that this is compelling evidence that CMR is vastly exaggerating the volume of its sales and the scale of its business.

<sup>†2012</sup> Estimate is calculated by annualizing the performance of the first 6 months of 2012

<sup>\*\*</sup>Assuming a yield of 90%

<sup>\*\*</sup>Source: MEP Data

Do not take our word for it. The MEP database is publicly available online at this <u>website</u> (<u>datacenter.mep.gov.cn</u>). For your convenience, we have also downloaded the contents of MEP database and uploaded the data to a file on our website, labeled CMR Supplemental Data (available <u>here</u>). We therefore urge regulators and investors to check the database independently.

#### 2) Copper Customs Data Corroborates Our Conclusion

Independent data on scrap copper imports, sourced from Chinese customs records, corroborates the information from the MEP website and confirms that the Company is not importing anywhere close to its reported volume of scrap metal.

Scrap copper accounts for approximately 95% of the Company's non-ferrous metals sales, <sup>12</sup> half of which is sourced through imports. <sup>13</sup> The following chart shows the breakdown the amount of scrap copper that the Company would have to import, given a market standard 30% yield, to produce its reported volume of finished copper.

CMR - Non-Ferrous Copper Volumes - Tonnage (30% Yield Assumption)

Implied Imported and Domestically Sourced Copper Tonnage	2006A	2007A	2008A	2009A	2010A	2011A	1H2012A	2012 (E)†
Total Implied Raw Scrap Volume - Non-Ferrous**	39,200	73,787	366,850	670,000	1,200,000	2,226,667	1,753,333	3,506,667
% Copper	95%	95%	95%	95%	95%	95%	95%	95%
Total Implied Scrap Copper Volume	37,240	70,097	348,508	636,500	1,140,000	2,115,333	1,665,667	3,331,333
% Imported Volume*	67%	80%	44%	50%	50%	50%	50%	50%
Implied Imported Scrap Copper Volume	24,951	55,727	152,298	318,250	570,000	1,057,667	832,833	1,665,667
Implied Domestically Sourced Scrap Copper Volume	12,289	14,370	196,210	318,250	570,000	1,057,667	832,833	1,665,667

<sup>\*2006-2008</sup> Import Percentages are found in the Prospectus. 2009-2012 are estimates based on analyst consensus.

For the Company's financials to be true, the Company would have to **import an average of ~113,000** tons of scrap copper per month in 2011 and 2012. 4 Again, independent data shows it is nowhere close.

Asian Metal (<u>www.asianmetal.com</u>) is a specialized metal and steel data research company based in China. Asian Metal has a distribution agreement with the Chinese government and each month it publishes a list, based on Chinese customs data, of the top ten importers of scrap copper. As an example, we include the three most recent top ten lists that were available (each of the top ten lists that we could obtain from 2011 and 2012 are included in **Appendix I** at the end of this Report).

<sup>13</sup> Macquarie Equities Research Report initiating coverage on CMR, November 2011; Deutsche Bank Market Research report July 2012

<sup>\*\*</sup>Calculated in the table on page 6 of this report, assuming a yield of 30%

<sup>†2012</sup> Estimate is calculated by annualizing the performance of the first 6 months of 2012

<sup>&</sup>lt;sup>12</sup> Guoyuan Securities Initiation Report, August 2010.

Research report, July 2012.

14 *Calculation*: ((1,057,667 + 1,665,667) / 24). Calculation ((Implied 2011 Scrap Copper Import Volume + Implied 2012 Scrap Copper Import Volume) / 24 months). Assumes 30% yield.

#### September 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)		
1	台州齐合天地金属有限公司	49,664,022	49,664	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	19,019,599	19,020	
3	宁波涵盈金属工业有限公司	15,250,378	15,250	
4	宁波金田铜业(集团)股份有限公司	13,459,197	13,459	
5	清远华恒进出口贸易有限公司	10,164,025	10,164	
6	广东恒通合力进出口贸易有限公司	10,139,778	10,140	
7	齐合天地(宁波)再生金属有限公司	9,819,593	9,820	<= Chiho Tiande 976 HK
8	山东天圆铜业有限公司	8,953,945	8,954	
9	广州市昊昕进出口贸易有限公司	8,130,800	8,131	
10	天津亚铜钢铁有限公司	7,750,963	7,751	<= CMR 773 HK
	Top 10 combined	152,352,300	152,352	
	Chiho Tiande 976 HK		59,484	
	Total Scrap Import in China		460,000	
	Top 10 company market share		33%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1467753

Total scrap import data

 $\underline{\text{http://www.customs.gov.cn/publish/portal0/tab400/module15677/info391653.htm}}$ 

#### October 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)		
1	台州齐合天地金属有限公司	41,657,151	41,657	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	16,904,239	16,904	
3	宁波金田铜业(集团)股份有限公司	12,957,496	12,957	
4	齐合天地(宁波)再生金属有限公司	12,939,817	12,940	<= Chiho Tiande 976 HK
5	山东天圆铜业有限公司	10,897,013	10,897	
6	清远华恒进出口贸易有限公司	9,978,257	9,978	
7	广州市昊昕进出口贸易有限公司	8,886,575	8,887	
8	营口杰诺瑞尔实业有限公司	8,747,149	8,747	
9	中山市恒通进出口有限公司	8,603,810	8,604	
10	肇庆市盛林再生资源有限公司	8,504,251	8,504	
	Top 10 combined	140,075,758	140,076	
	Chiho Tiande 976 HK		54,597	
	Total Scrap Import in China		390,000	
	Top 10 company market share		36%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1487387

Total scrap import data

http://www.customs.gov.cn/publish/portal0/tab400/module15677/info396980.htm

#### November 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)	进口量(吨)	
1	台州齐合天地金属有限公司	34,688,047	34,688	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	20,532,042	20,532	
3	齐合天地(宁波)再生金属有限公司	17,486,727	17,487	<= Chiho Tiande 976 HK
4	清远华恒进出口贸易有限公司	13,218,062	13,218	
5	广州市昊昕进出口贸易有限公司	11,105,248	11,105	
6	宁波金田铜业(集团)股份有限公司	10,757,256	10,757	
7	肇庆市盛林再生资源有限公司	10,743,779	10,744	
8	山东天圆铜业有限公司	8,512,615	8,513	
9	天津博瑞特金属制品有限公司	8,133,868	8,134	
10	沈阳星河铜业有限公司	6,595,037	6,595	
	Top 10 combined	141,772,681	141,773	
	Chiho Tiande 976 HK		52,175	
	Total Scrap Import in China		450,000	
	Top 10 company market share		32%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1504230

Total scrap import data

http://www.customs.gov.cn/publish/portal0/tab400/module15677/info403744.htm

To produce its reported volume of processed copper, CMR would have to import an average of ~113,000 tons of scrap copper per month in 2011 and 2012, which in turn would have made it by far the largest importer of scrap copper for each month during that period.

Yet, if we look at the Asian Metals lists of top ten importers of copper for 18 of the past 24 months (the other months were not available), <sup>15</sup> a CMR subsidiary only appeared in the top ten list once in eighteen months (September 2012 – pictured above), and then, only in tenth place!

In its only top-ten appearance, customs data from Asian Metal showed that CMR imported a paltry 7,751 tons of scrap copper in September 2012, even though the Company implies to have been importing almost an average of ~113,000 tons on average per month at this time.

Not only is CMR noticeably absent from the customs data on major copper importers, but its competitor, Chiho-Tiande, was the #1 importer of copper every month, even though it is supposedly 1/5<sup>th</sup> the size of CMR (measured by reported non-ferrous metal sales). In fact, Chiho-Tiande was the top importer of scrap copper during this period, accounting for 13% of the market in 2011 and 12% in 2012. If CMR were really importing the volume of scrap copper that it claims, it would appear at or near the top of the Asian Metals top ten lists.

<sup>15</sup> We could not locate the lists from Feb 2011, July 2011, April 2012, May 2012, June 2012 and December 2012.

Even if we give the Company the benefit of the doubt and assume a yield of copper to scrap of 90%, which again is unheard of China, CMR would still have to be importing ~37,000 tons of scrap per month<sup>16</sup> in 2011-2012 (see chart below) in order produce its reported amount of finished copper.

CMR - Non-Ferrous Copper Volumes - Tonnage (90% Yield Assumption)

Implied Imported and Domestically Sourced Copper Tonnage	2006A	2007A	2008A	2009A	2010A	2011A	1H2012A	2012 (E)†
Total Implied Raw Scrap Volume - Non-Ferrous**	13,067	24,596	122,283	223,333	400,000	742,222	584,444	1,168,888
% Copper	95%	95%	95%	95%	95%	95%	95%	95%
Total Implied Scrap Copper Volume	12,414	23,366	116,169	212,166	380,000	705,111	555,222	1,110,444
% Imported Volume*	67%	80%	44%	50%	50%	50%	50%	50%
Implied Imported Scrap Copper Volume	8,317	18,576	50,766	106,083	190,000	352,555	277,611	555,222
Implied Domestically Sourced Scrap Copper Volume	4,097	4,790	65,403	106,083	190,000	352,555	277,611	555,222

<sup>\*2006-2008</sup> Import Percentages are found in the Prospectus. 2009-2012 are estimates based on analyst consensus.

The customs data from Asian Metals corroborates the conclusion that we draw from the MEP database: that CMR is fabricating the volume of its import, the size of its sales and the scale of its business.

We believe that the SFC should confirm the findings set forth above, which are publicly available from both the Ministry of Environmental Protection and from Asia Metals, and then halt the trading of CMR's stock to protect investors in the Hong Kong markets from further losses.

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<sup>\*\*</sup>Calculated in the table on page 6 of this report, assuming a yield of 30%

<sup>†2012</sup> Estimate is calculated by annualizing the performance of the first 6 months of 2012

 $<sup>^{16}</sup>$  Calculation: ((352,555 + 555,222) / 24). Calculation ((Implied 2011 Scrap Copper Import Volume + Implied 2012 Scrap Copper Import Volume) / 24 months). Assumes 90% yield.

#### 3) CMR's Implied Market Share is Ludicrous

In order to produce CMR's reported volume of processed copper, CMR would have to account for 34% of all imported scrap copper and over 50% of the domestic scrap copper market in 2012. In the following chart, we calculate CMR's implied market share (assuming a 30% yield).

CMR - Non-Ferrous Copper Volumes - Tonnage (30% Yield Assumption)

Implied Imported and Domestically Sourced Copper Tonnage	2008A	2009A	2010A	2011A	2012 (E)†
Total Implied CMR Raw Scrap Volume - Non-Ferrous**	366,850	670,000	1,200,000	2,226,667	3,506,667
% Copper	95%	95%	95%	95%	95%
Total Implied CMR Scrap Copper Volume	348,508	636,500	1,140,000	2,115,333	3,331,333
% Imported Volume*	44%	50%	50%	50%	50%
Implied CMR Imported Scrap Copper Volume	152,298	318.250	570.000	1,057,667	1,665,667
Implied CMR Domestically Sourced Scrap Copper Volume	196,210	318,250	570,000	1,057,667	1,665,667
Total Imported Scrap Copper Market***	5,600,000	4,000,000	4,400,000	4,700,000	4,900,000
CMR Implied Market Share of Imported Scrap Marlet	3%	8%	13%	23%	34%
Total Domestic Scrap Copper Market††	1,666,667	2,000,000	2.333.333	2,666,667	3,000,000
CMR Implied Market Share of Domestic Scrap Market	12%	16%	24%	, ,	56%

<sup>\*2006-2008</sup> Import Percentages are found in the Prospectus. 2009-2012 are estimates based on analyst consensus.

If regulators and investors were to take the Company's reported production volumes at face value, CMR should be importing almost 34% of the copper coming into China in 2012. We know from the **Asian Metals** customs data that the top ten **importers of copper combine** to account for 30% of the copper import market. In other words, there is no way that the Company alone accounts for 34% of China's scrap copper imports.

Furthermore, CMR would also have to account for 56% of China's domestic scrap copper supply. Not only is it implausible that CMR purchases **over half of China's domestic scrap metal** supply, but even the Company admits that such level of concentration does not exist in China's fragmented domestic market. CMR states in its prospectus that "copper resources are in relatively short supply in china, with domestic copper ore resources characterized by small scale miners, low grade ore, ore deposits mined for other minerals and high exploration costs." <sup>17</sup>

Put simply, we believe that there is not enough scrap copper sold in China for CMR's reported production volume to be true.

<sup>\*\*</sup>Calculated in the table on page 6 of this report, assuming a yield of 30%

<sup>\*\*\*</sup>Total Imported Scrap Copper Market sourced from the General Administration of Customs of the PRC

<sup>- 2008:</sup> http://www.customs.gov.cn/publish/portal0/tab400/module15677/info155565.htm

<sup>- 2009:</sup> http://www.customs.gov.cn/publish/portal0/tab400/module15677/info207143.htm

<sup>- 2010:</sup> http://www.customs.gov.cn/publish/portal0/tab1/info281219.htm

<sup>- 2011:</sup> http://www.customs.gov.cn/publish/portal0/tab400/module15677/info348299.htm

<sup>- 2012:</sup> http://www.customs.gov.cn/publish/portal0/tab44602/module108994/info412941.htm

<sup>†2012</sup> Estimate is calculated by annualizing the performance of the first 6 months of 2012

<sup>++</sup> http://www.chinania.org.cn/uploadfile/2011/0926/20110926104604623.pdf - (assuming a 30% yield)

<sup>&</sup>lt;sup>17</sup> CMR Global Offering (pg. 88) (<u>http://www.chinametalrecycle.com/en/investor\_Prospectus.html</u>; also available at <a href="http://www.hkexnews.hk/listedco/listconews/SEHK/2009/0610/LTN20090610004.pdf">http://www.hkexnews.hk/listedco/listconews/SEHK/2009/0610/LTN20090610004.pdf</a>.

#### VOLUME TO LARGEST CUSTOMER HIGHLY UNLIKELY

Publicly available data provides another data point suggesting that CMR is fabricating the scale of its business. For the Company's financials to be believed, CMR would have to account for **84% of the non-ferrous metals** supplied to its largest customer (a Guangzhou state owned enterprise), a level of supplier concentration we find highly unlikely.

CMR's largest customer for the last six years is Guangzhou Iron & Steel Enterprises Group ("GISE") (www.gise.cn), which the Company confusingly refers to in its filings as 'GSEG' (even though its actual initials are GISE).<sup>18</sup>



According to the Company, sales to GSEG were "mainly attributable to non-ferrous metals sales." In the table below, we estimate the reported volume of non-ferrous metals that CMR has sold to GISE since 2006.

Sales to GSEG Group, aka Guangzhou Iron & Steel

Figures in HK\$ MM (unless otherwise noted)	2006A	2007A	2008A	2009A	2010A	2011A
Total CMR Sales to GSEG Group	664	679	1,981	2,254	5,666	5,369
CMR % of Non-Ferrous Sales of Total Sales	56%	64%	65%	84%	77%	78%
Implied Sales of Non-Ferrous to GSEG Group	372	433	1,286	1,900	4,385	4,174
Implied Non-Ferrous ASP (HK\$/ton)†	51,956	55,972	38,481	38,025	48,389	60,678
Implied Non-Ferrous Volume sold to GSEG (tons)	7,167	7,742	33,410	49,979	90,618	68,786

2011 Data, Company Annual Report, pages 112 and 172; http://www.hkexnews.hk/listedco/listconews/SEHK/2012/0404/LTN20120404004.pdf

2010 Data, Company Annual Report, pages 109 and 169; http://www.hkexnews.hk/listedco/listconews/SEHK/2011/0408/LTN20110408806.PDF

2009 Data, Company Annual Report, pages 101 and 157; http://www.hkexnews.hk/listedco/listconews/SEHK/2010/0426/LTN20100426263.pdf

2006 - 2008 Data, Global Offering, pages 114 and 153; http://www.hkexnews.hk/listedco/listconews/SEHK/2009/0610/LTN20090610004.pdf

Because GISE is a state-owned enterprise based in Guangzhou, its financials and production data are published annually by the Guangzhou Municipal Government in the official Guangzhou Yearbook. According to the Guangzhou Yearbook, GISE has three main subsidiaries:

- 1. Guangzhou Iron and Steel
- 2. Guangzhou Zhujiang Iron
- 3. GISE Nonferrous Metals Group

GISE discloses production figures for three categories: steel, steel materials and non-ferrous metals. All of GISE non-ferrous production volume comes from the GISE Nonferrous Metals Group, which also discloses, separately, detailed production figures for major categories (electrolytic copper, non-ferrous metal alloy, copper materials, aluminum materials and zinc materials).

1

 $<sup>\</sup>dagger$  CMR implied non-ferrous ASP is calculated by dividing reported CMR non-ferrous sales by the CMR implied non-ferrous volume tonnage

<sup>18</sup> www.gise.cn

The table below includes GISE non-ferrous metal production figures, which are publicly available and can be verified by any investor from the website listed below.

#### **GISE Production Breakdown**

All figures are in Tons (unless otherwise noted)	2006A	2007A	2008A	2009A	2010A	2011A
GISE Group						
Steel Production	3,315,000	3,519,700	3,234,800	2,504,100	2,420,000	1,320,000
Steel Materials Production	3,542,600	3,890,600	3,668,000	2,994,300	2,990,000	1,970,000
Non-Ferrous Metal Production	140,100	136,600	112,400	107,800	130,700	81,800
GISE NonFerrous Metals Group						
Revenue (RMB MM)	7,633	7,861	6,442	6,932	9,478	6,319
Non-Ferrous Metal Production	140,100	136,600	112,400	107,800	130,700	81,800
Non-Ferrous Volume Supplied by CMR	7,167	7,742	33,410	49,979	90,618	68,786
% share of GISE Production	5%	6%	30%	46%	69%	84%

Source:

For GISE Group Production Data

2011 - From Guangzhou Yearbook (2012), available via order from yearbook@public.guangzhou.gd.cn

2010 - http://www.guangzhou.gov.cn/node 450/node 724/2011nj/html/0462.htm

2009 - http://www.guangzhou.gov.cn/node 450/node 724/2010nj/html/0450.htm

2008 - http://www.guangzhou.gov.cn/node 450/node 724/2009nj/html/0710.htm

2007 - http://www.guangzhou.gov.cn/node\_450/node\_724/2008nj/html/0663.htm

2006 - http://www.guangzhou.gov.cn/special/2008/2007gznj/html/0675.htm

For Guangzhou Nanfang Nonferrous Metal Co., Ltd. Production on Nonferrous Metal, as well as the Categories Decomposition numbers

2011 - From Guangzhou Yearbook (2012), available via order from yearbook@public.guangzhou.gd.cn

2010 - http://www.guangzhou.gov.cn/node 450/node 724/2011nj/html/0464.htm

2009 - http://www.guangzhou.gov.cn/node 450/node 724/2010nj/html/0452.htm

2008 - http://www.guangzhou.gov.cn/node 450/node 724/2009nj/html/0712.htm

2007 - http://www.guangzhou.gov.cn/node 450/node 724/2008nj/html/0665.htm

2006 - http://www.guangzhou.gov.cn/special/2008/2007gznj/html/0677.htm

We are highly skeptical that CMR could go from a marginal supplier of 5% of GISE's non-ferrous metals in 2006 to supplying 84% of its non-ferrous metals in 2011. We are also skeptical that CMR's share of the state owned enterprise's non-ferrous supply increased **sixteen times** in five years, especially considering that GISE's non-ferrous production **declined significantly** during that period.

#### FICTITIOUS FINANCIALS

A common denominator of companies that have collapsed under allegations of fraud is that their performance appears too good to be true. CMR is no different.

Recycling scrap metal is not rocket science. CMR does not possess any notable technological advantage over its peers. In fact, most of its domestic and global competitors have much more experience in the business than CMR.

Yet CMR claims to be the industry leader in almost every financial metric, including growth, capital efficiency, employee productivity, inventory turnover, sales prices and returns on capital. A quick tour of the Company's financials shows its books do not pass the smell test. The raw data for each graph in this section can be found in **Appendix II**.

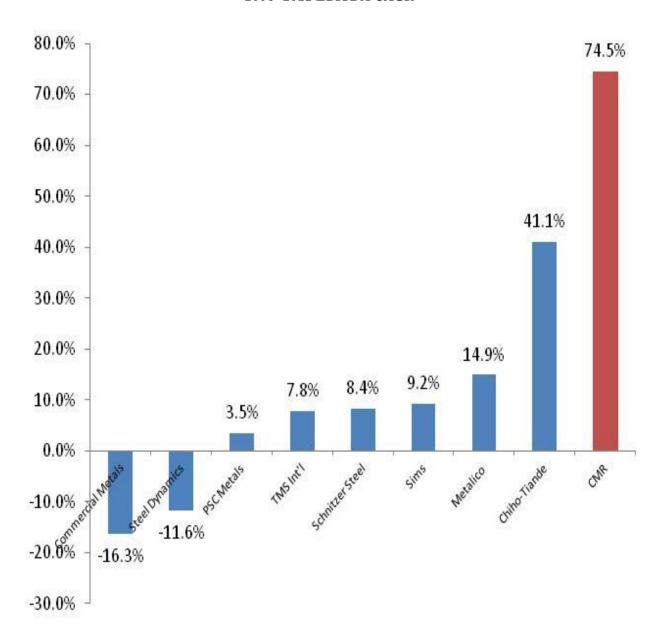
#### 1) Suspiciously Amazing Growth Rate

First, the Company's revenue and EBITDA growth from 2006-2011 is simply unprecedented and bears no resemblance to the growth trajectory of its domestic and international peers.

### 140% 116.5% 120% 100% 80% 60% 52.8% 40% 27.8% 26.1% 16.9% 14.1% 20% 9.0% 4.0% 3.0% Schnitzer Steel 0% Steel Dynamics Chiho Tlande THE INT! ONR Metalico

2006- 2011 Revenue CAGR

#### 2006- 2011 EBITDA CAGR

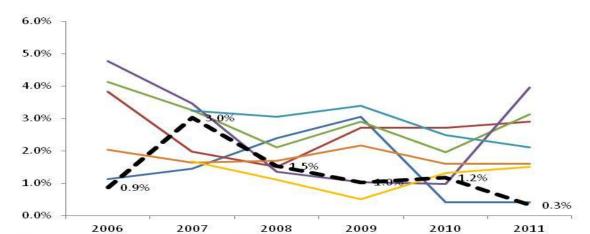


Compared to other scrap metal recyclers, CMR's financial performance is simply incredible. From 2006-2011, the company's revenues grew at over the double the rate of its nearest domestic competitor, and nearly five to ten times the rate of most of its more-experienced international peers. The Company's EBITDA growth is similarly spectacular.

More suspiciously, the Company achieved such phenomenal growth even though, relative to its peers, its capital expenditures were minimal.

TMS Int'l

Sims



Capital Expenditures as a % of Sales 19

Nor can increased productivity at CMR's existing facilities explain the growth. From 2006 to 2011, the Company's capacity utilization remained below 50%.

Schnitzer Steel

PSC Metals

CMR

**CMR - Capacity Utilization** 

All figures are in Tons (unless otherwise noted)	2006	2007	2008	2009	2010	2011
Total Capacity	570,000	970,000	1,850,000	2,100,000	3,125,000	4,900,000
Production						
Total Ferrous	263.093	296.886	605,385	562.000	1,570,000	1,850,000
Total Non-Ferrous	11,760	22,136	110,055	201,000	360,000	668,000
	1000-601-10005	10000		700000 <b>1</b> 0000000		
Total Production	274,853	319,022	715,440	763,000	1,930,000	2,518,000
Capacity Utilization	48%	33%	39%	36%	62%	51%

Sources: Production Figures given in Company Filings

Commercial Metals

Metalico

Chiho-Tiande

Total Capacity for 2006-2009 taken from table on pg. 118 of the Global Offering

2010 Total Capacity is estimated from the 2010 Annual Report and the Global Offering

2011 Total Capacity taken from the Company's 2012 Management Presentation (See Appendix III)

Given the CMR's lack of capital expenditures and low capacity utilization, the Company's meteoric growth seems too good to be true. Other financial metrics support this conclusion.

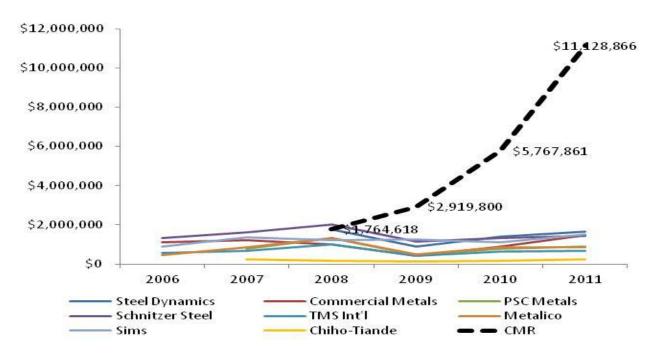
#### 2) Employee Efficiency Metrics Suggest Fraud

CMR claims to generate \$US 11 million of revenue **per employee**, a worker productivity rate that is **eleven times the revenue generated by its closest competitors** and almost six times the revenue per employee generated by the tech-giant Apple Inc. (~ \$US 2 million <u>per employee</u>), generally regarded as one of the world leaders in yield per employee. This is simply not believable. By industry standards, the following graph shows that CMR's performance is so fantastic as to defy credibility.

19

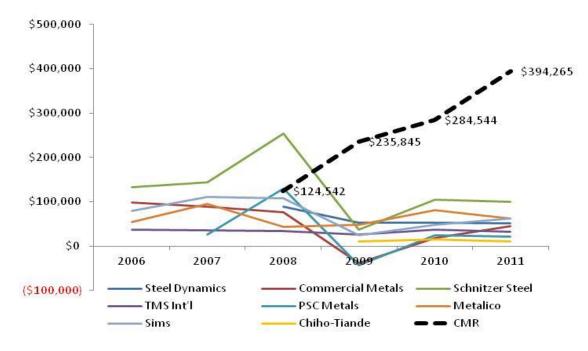
<sup>&</sup>lt;sup>19</sup> CMR Capex includes purchases of PP&E, along with deposits and purchases of PP&E and land use rights.

#### Revenues/Employee



Measured on an EBITDA/employee scale, the Company's performance seems similarly absurd.

#### EBITDA/Employee



In our experience, when management teams exaggerate sales and growth numbers, they often forget to give a commensurate boost to other operational metrics such as employee headcount. Thus, productivity ratios and other efficiency ratios that significantly deviate from the industry standard are often red flags when accompanied by suspiciously amazing financial performance. We suspect that CMR's management

simply forgot to increase its headcount when it juiced its sales figures, as there is no feasible way that a burgeoning scrap metal recycler can produce almost eleven times the revenue per employee than its nearest competitor.

#### 3) Inexplicable Operational Efficiency

The Company's reported inventory turnover is also purportedly best in class (by a healthy distance), further undermining the credibility of its financial statements.

# Chiho-Tiande CMR Sims Metal **PSC Metals** Metalico

#### Days in Inventory

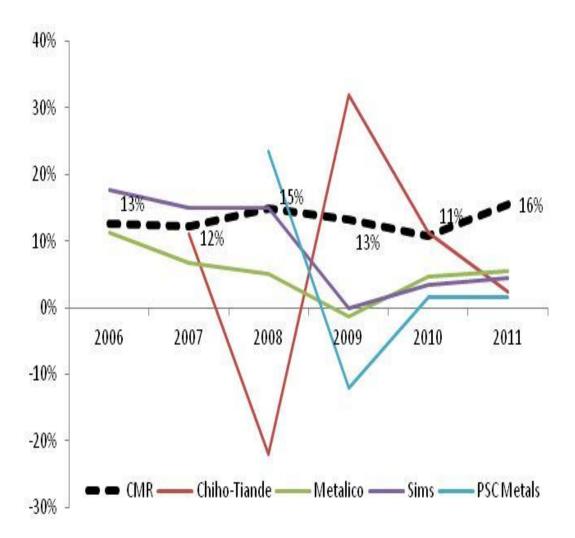
Not only does the Company claim to turn inventory more than twice as fast as its global peers, but it also appears to be at least five times as efficient as Chiho-Tiande, its domestic competitor.

How can any investor believe such reported numbers to be true? Either CMR, as a relatively new entrant, has revolutionized the scrap metal recycling industry and achieved a level of operational efficiency so much greater than its peers that it should be the subject of business school case studies for decades to come, or it is simply a fraud. We think the answer is obvious.

#### 4) Madoffian Returns on Capital

One of the hallmark features of Bernie Madoff's Ponzi scheme was that he consistently produced positive monthly returns despite wild swings in the market. The consistency of CMR's performance bears a striking resemblance to Madoff's returns: notice in the chart below how the Company's return on capital is remarkably consistent and was positive during the financial crash of 2008 – 2009.

#### Return on Capital



How many suspicious metrics do investors and regulators need to realize that the only explanation for the Company's unusually strong performance is that the Company is dabbling in the dark arts of accounting?

#### WOE BE THE CFO

On November 18, 2009, a mere six months after the CMR's initial public offering, its CFO and deputy Chief Executive Officer, Wong Hok-Leung, **resigned** from the Company after only 18 months at the position, sending its share price plummeting by as much as 45%. The circumstances surrounding Wong's resignation strongly suggest that the Company is engaging in financial improprieties.

On November 3, 2009, two weeks before his resignation, Wong approached the audit committee with "certain issues . . . that concerned him relating to the business of the Company." <sup>21</sup> No CFO would make any such accusations lightly: he would know that after he went to the audit committee with evidence or suspicions of impropriety, either he would most likely be terminated or the audit committee would begin a very contentious examination into the management team. At the very least, any CFO would know that such accusations would ruin his relationship with other executive officers and possibly derail his career.

The fact that Wong would risk his professional reputation and his job by going to the audit committee suggests that he suspected that the Company was engaging in impropriety.

In response, the audit committee brought the CFO's allegations to the board of directors (which included the CEO and other non-independent directors). The board then approached management, from whom it "received a verbal confirmation . . . that the issues raised by Mr. Wong should have no material adverse impact on the Company." <sup>22</sup>

During this time, Wong alleges that he was denied access to the financial information of the Company in connection with his whistle-blowing investigation. Why? According to CMR, "the Company's IT department had recently performed a security upgrade on its servers that disabled computer access to the financial database." What are the odds that the Company was performing routine security updates that denied a CFO access to Company data at the same time as the CFO may have been investigating potential accounting fraud?

Stop to consider the absurdity of this chain of events. The CFO approached the audit committee with what most likely amounted to strong suspicions of fraud. But rather than hiring an independent accountant or law firm to review its CFO's allegations, the audit committee and the board of directors appeares to have done little to investigate its CFO's suspicions. **Only 4 days after Wong first approached the audit committee with his suspicions**, on November 7, 2009, the board seemed ready to put the scandal to rest by receiving "verbal assurances" from the management team that everything was fine.

This is surreal. If a CFO approached the audit committee with allegations of fraud, the board should have spent **more than four days** investigating the allegations and should not have gained any comfort from the **mere verbal assurances** of the same management team potentially accused of fraud.

Five days after the board of directors dismissed his concerns, Wong resigned. According to Wong, he resigned because the board of directors was refusing to cooperate with his investigation into suspicious aspects of CMR's financials:

22 http://www.hkexnews.hk/listedco/listconews/SEHK/2009/1117/LTN20091117003.pdf

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<sup>&</sup>lt;sup>20</sup> http://www.hkexnews.hk/listedco/listconews/SEHK/2009/1117/LTN20091117003.pdf

<sup>21</sup> http://www.hkexnews.hk/listedco/listconews/SEHK/2009/1117/LTN20091117003.pdf

Mr. Wong stated in his notice that the reasons for his resignation were that the Board had failed to address his concerns or provide clarification on certain issue and that he had been denied proper access to the financial information of the Company.<sup>23</sup>

Wong's accusations are even more significant considering that he was both CFO and deputy CEO, **effectively second in command at the Company**. Wong also has an impressive pedigree, further enhancing his credibility. He is a British citizen and a member of the Association of Certified Chartered Accountants in the United Kingdom.<sup>24</sup>

A recent study of public company accounting fraud shows that in the three years prior to the discovery of fraud, companies manipulating financial statements experienced higher CFO turnover than non-manipulating firms. The study suggests that turnover is high at fraudulent companies because CFOs who refuse to bury their head in the sand either leave or are fired. In CMR's case, the shoe seems to fit.

We believe that the circumstances surrounding Wong's resignation strongly corroborate the evidence of fraud compiled in this report.

#### **CHAIRMAN CASHING OUT**

On January 25, 2013, CMR announced that its Chairman, CEO and founder, Chun Chi Wai, entered into an agreement with a state-owned enterprise to sell 56% of his shares (and 29% of the total shares of the Company) at HKD ~9.99 per share (a 5% premium to the closing price of CMR's shares on January 25). The purchaser named in the Company's filing is the China Energy Conservation and Environmental Protection Group (the "Purchaser" or the "SOE"), a state-owned enterprise under the direct supervision and ownership of State-owned Assets Supervision and Administration Commission of the State Council of the PRC.

The inescapable inference from this transaction is that, at least in the eyes of the man who knows the most about the Company, the value of CMR's shares has peaked. In our opinion, Chun Chi Wai had a clear incentive to cash out before the information that we discuss in this report became widely known. When the man who knows the most about CMR cashes out of the majority of his shares, investors would be wise to heed his example.

But why would a PRC state-owned enterprise agree to pay a princely ransom for equity that we believe is worthless? We believe that there are two possible explanations: either the Purchaser is another victim of CMR's deception, or officials at the SOE are corrupt and thus complicit in the fraud. We will briefly discuss both alternatives.

The first alternative is that the Purchaser is yet another victim of a financial track record that we believe to be a hoax. If the SOE and its officials who negotiated the purchase of Chun Chi Wai's shares are truly innocent, we believe that they will use the information contained in this report to walk away from the deal rather than allow Communist Party officials to become the humiliated victims of what, in our opinion, is a blatant fraud.

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<sup>&</sup>lt;sup>23</sup> November 17, 2009, Press Release http://www.chinametalrecycle.com/en/investor\_announcement.html.

<sup>24</sup> http://www.cfoinnovation.com/content/commentary-when-cfo-resigns

<sup>&</sup>lt;sup>25</sup> "Why Do CFOs Become Involved in Material Accounting Manipulations?" is forthcoming in the Journal of Accounting and Economics. It is the work of Weili Ge and Terry Shevlin of the University of Washington Foster School of Business, and Mei Feng and Shuqing Luo of the University of Pittsburgh Katz Graduate School of Business.

<sup>&</sup>lt;sup>26</sup> http://www.hkexnews.hk/listedco/listconews/SEHK/2013/0125/LTN20130125718.pdf

The Sale and Purchase Agreement governing the transaction is conditioned upon various approvals and consents from PRC authorities and CMR's lenders and is subject to cancellation if shares of CMR are suspended from trading for more than 20 consecutive days. There is ample opportunity for the Purchaser to get out of the deal once officials at the SOE review of the publicly available evidence highlighted in this report.

The second possible alternative is that the Purchaser knows that CMR is a blatant fraud and that the officials who orchestrated the share purchase are corrupt. If this is the case, we believe that the consequences could be dire as they would be directly insulting ascendant party leader Xi Jinping, who vowed to the Chinese people last week to crack down on both "tigers" and "flies" – powerful leaders and lowly bureaucrats – in his fight against corruption.<sup>27</sup>

Xi Jinping rose to prominence and leadership within the Communist Party as a crusader against corruption. In November 2012, Mr. Xi made a famous speech at a politburo session in which he stated that corruption could "kill the party and ruin the country." The China Daily News wrote that his "remarks are a sign of new leadership's determination to fight corruption in the coming years."<sup>29</sup> Mr. Xi's rhetoric has only escalated since then.

As president in waiting, he gave a speech **only last week** in which he raised the stakes in his country's fight against corruption: "we must uphold the fighting of tigers and flies at the same time, resolutely investigating law-breaking cases of leading officials and also earnestly resolving the unhealthy tendencies and corruption problems which happen all around people." "Power" he added, "should be restricted by the cage of regulations."<sup>30</sup>

We believe that the officials at the SOE that agreed to purchase Chun Chi Wai's shares (which we believe are worthless) for HKD 3.4 billion were either the victims of a deception or they are participating in a corrupt act. In our view, the evidence presented in this report makes perfectly clear that the Company has vastly exaggerated the size of its business and fabricated its financial performance. If Chun Chi Wai sells shares to a Chinese SOE, we believe that he puts both himself and those officials at the SOE who negotiated the transaction in grave danger of becoming targets in Mr. Xi's battle against corrupt officials. The punishments could be dire for all involved, including death. 31

#### **VALUATION**

We believe that the SFC and the Hong Kong Stock Exchange will quickly verify the evidence presented in this report and halt trading of CMR's stock before any more investors are hurt. We also believe that regulators will thereafter delist the Company and prosecute those executives responsible for the fraud.

There is a wealth of evidence to support our contention that CMR has vastly exaggerated its sales and the size of its business. To take it one step further, we believe it is likely that the Company has also inflated the size of current assets such as deposits, receivables and cash to keep the lie consistent. After all, if a company is booking fake sales, the balance sheet will usually balloon with fake cash and fake receivables. Therefore, if the Company collapses under allegations of fraud, the only assets available to yield any recovery to creditors would most likely be property and fixed assets.

<sup>&</sup>lt;sup>27</sup> http://www.guardian.co.uk/world/2013/jan/22/xi-jinping-tigers-flies-corruption

http://www.bbc.co.uk/news/world-asia-china-20405106

<sup>&</sup>lt;sup>29</sup> http://www.chinadaily.com.cn/cndy/2012-11/20/content 15942984.htm

http://www.guardian.co.uk/world/2013/jan/22/xi-jinping-tigers-flies-corruption

http://www.nytimes.com/2007/07/07/business/worldbusiness/07drug.html

As of June 2012, CMR has **HKD 5.7 billion** of bank debt outstanding, the holders of which would take priority over shareholders. The book value of the Company's property, plant and equipment is only **HKD 460 million**, so even after senior secured bank creditors seize CMR's fixed assets, **the banks will still be owed over HKD 5 billion!** After senior secured debt holders, local Chinese unsecured creditors with priority over Hong Kong shareholders are owed roughly **HKD 10 billion** (in payables). <sup>32</sup>

Ultimately, the Company's heavily levered balance sheet and the scale of its deception suggest that shareholders will be left with nothing. We therefore put a price target on CMR's shares of **HKD 0.00**.

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<sup>&</sup>lt;sup>32</sup> CMR 2012 Interim Report, http://www.hkexnews.hk/listedco/listconews/SEHK/2012/0927/LTN20120927074.pdf

#### APPENDIX I

#### ASIAN METALS MONTHLY COPPER IMPORT TOP TEN LISTS

#### January 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)	进口量(吨)	
1	台州齐合天地金属有限公司	39,893,453	39,893	<= Chiho Tiande 976 H
2	齐合天地(宁波)再生金属有限公司	13,164,345	13,164	<= Chiho Tiande 976 H
3	广州市铠特威金属材料开发有限公司	11,948,090	11,948	
4	佛山市明杰进出口贸易有限公司	9,090,495	9,090	
5	佛山市正利贸易有限公司	8,828,770	8,829	
6	广州市昊昕进出口贸易有限公司	8,666,580	8,667	
7	佛山市翔澳废旧五金加工利用有限公司	8,399,219	8,399	
8	宁波涵盈金属工业有限公司	8,026,789	8,027	
9	佛山市粤有诚经贸有限公司	5,734,320	5,734	
10	佛山市南海区万兴隆金属制品有限公司	5,401,851	5,402	
	Top 10 combined	119,153,912	119,154	
	Chiho Tiande 976 HK		53,058	
	Total Scrap Import in China		360,000	
	Top 10 company market share		33%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1119784

Total scrap import data

http://news.steelhome.cn/2011/02/14/n1933905.html

#### March 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)	进口量(吨)	
1	台州齐合天地金属有限公司	21,804,599	21,805	<= Chiho Tiande 976 HK
2	台州长青金属有限公司	18,373,657	18,374	
3	宁波涵盈金属工业有限公司	12,038,418	12,038	
4	广东恒通合力进出口贸易有限公司	8,445,608	8,446	
5	齐合天地(宁波)再生金属有限公司	7,887,958	7,888	<= Chiho Tiande 976 HK
6	佛山市明杰进出口贸易有限公司	7,068,871	7,069	
7	山东天圆铜业有限公司	6,101,881	6,102	
8	清远市永然贸易有限公司	5,497,269	5,497	
9	宁波金田铜业(集团)股份有限公司	5,376,373	5,376	
10	中山市恒通进出口有限公司	5,240,970	5,241	
	Top 10 combined	97,835,604	97,836	
	Chiho Tiande 976 HK		29,693	
	Total Scrap Import in China		390,000	
	Top 10 company market share		25%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1148118

Total scrap import data

http://www.customs.gov.cn/publish/portal0/tab400/module15677/info297372.htm

#### April 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)	进口量(吨)	
1	台州齐合天地金属有限公司	32,486,806	32,487	<= Chiho Tiande 976 HK
2	宁波涵盈金属工业有限公司	15,509,263	15,509	
3	佛山市翔澳废旧五金加工利用有限公司	12,213,030	12,213	
4	齐合天地(宁波)再生金属有限公司	11,584,189	11,584	<= Chiho Tiande 976 HK
5	广东恒通合力进出口贸易有限公司	7,772,961	7,773	
6	佛山市欧达同人贸易发展有限公司	7,419,360	7,419	
7	清远华恒进出口贸易有限公司	6,169,248	6,169	
8	佛山市明杰进出口贸易有限公司	6,158,490	6,158	
9	山东天圆铜业有限公司	6,061,506	6,062	
10	清远市永然贸易有限公司	6,039,461	6,039	
	Top 10 combined	111,414,314	111,414	
	Chiho Tiande 976 HK		44,071	
	Total Scrap Import in China		380,000	
	Top 10 company market share		29%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1159998

Total scrap import data

http://huzhu.zz91.com/viewReply610861.htm

#### May 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)	进口量(吨)	
1	台州齐合天地金属有限公司	32,008,408	32,008	<= Chiho Tiande 976 HK
2	佛山市翔澳废旧五金加工利用有限公司	17,877,737	17,878	
3	宁波涵盈金属工业有限公司	17,197,265	17,197	
4	清远华恒进出口贸易有限公司	16,870,988	16,871	
5	齐合天地(宁波)再生金属有限公司	13,284,214	13,284	<= Chiho Tiande 976 HK
6	佛山市衡和进出口贸易有限公司	9,563,017	9,563	
7	佛山市南海统汇贸易有限公司	7,969,253	7,969	
8	宁波金田铜业(集团)股份有限公司	7,816,639	7,817	
9	肇庆市盛林再生资源有限公司	7,011,358	7,011	
10	佛山市南海启惟贸易有限公司	5,976,095	5,976	
	Top 10 combined	135,574,974	135,575	
	Chiho Tiande 976 HK		45,293	
	Total Scrap Import in China		400,000	
	Top 10 company market share		34%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1180195

Total scrap import data

http://money.163.com/11/0610/11/766CU6IC00253B0H.html

#### June 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)	进口量(吨)	
1	台州齐合天地金属有限公司	35,094,876	35,095	<= Chiho Tiande 976 HK
2	齐合天地(宁波)再生金属有限公司	15,089,416	15,089	<= Chiho Tiande 976 HK
3	清远华恒进出口贸易有限公司	11,567,836	11,568	
4	台州长青金属有限公司	11,138,381	11,138	
5	佛山市衡和进出口贸易有限公司	10,722,770	10,723	
6	佛山市南海区翔海贸易有限公司	9,961,932	9,962	
7	肇庆市盛林再生资源有限公司	9,885,457	9,885	
8	佛山市南海统汇贸易有限公司	8,480,382	8,480	
9	佛山市明杰进出口贸易有限公司	7,087,863	7,088	
10	佛山市翔澳废旧五金加工利用有限公司	7,004,095	7,004	
	Top 10 combined	126,033,008	126,033	
	Chiho Tiande 976 HK		50,184	
	Total Scrap Import in China		420,000	
	Top 10 company market share		30%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1198531

Total scrap import data

http://www.customs.gov.cn/publish/portal0/tab1/info308978.htm

#### August 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)	进口量(吨)	
1	台州齐合天地金属有限公司	42,594,069	42,594	<= Chiho Tiande 976 HK
2	齐合天地(宁波)再生金属有限公司	14,487,877	14,488	<= Chiho Tiande 976 HK
3	肇庆市盛林再生资源有限公司	10,434,542	10,435	
4	宁波涵盈金属工业有限公司	10,039,617	10,040	
5	江西稀有稀土金属钨业集团进出口有限公司	9,999,987	10,000	
6	台州市国信进出口有限公司	5,496,999	5,497	
7	广州市昊昕进出口贸易有限公司	5,278,896	5,279	
8	山东天圆铜业有限公司	5,158,356	5,158	
9	广东恒通合力进出口贸易有限公司	4,908,082	4,908	
10	中山市钟山进出口贸易有限公司	4,390,210	4,390	
	Top 10 combined	112,788,635	112,789	
	Chiho Tiande 976 HK		57,082	
	Total Scrap Import in China		380,000	
	Top 10 company market share		30%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1235823

Total scrap import data

http://info.jctrans.com/shuju/mysj/images/2011/9/16/49130.jpg

#### September 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)	进口量(吨)	
1	台州齐合天地金属有限公司	41,063,514	41,064	<= Chiho Tiande 976 HK
2	齐合天地(宁波)再生金属有限公司	17,688,831	17,689	<= Chiho Tiande 976 HK
3	宁波涵盈金属工业有限公司	13,305,934	13,306	
4	中山市恒通进出口有限公司	10,060,313	10,060	
5	肇庆市盛林再生资源有限公司	7,974,194	7,974	
6	佛山市翔澳废旧五金加工利用有限公司	7,539,040	7,539	
7	东营方圆有色金属有限公司	7,120,537	7,121	
8	深圳市科澳实业有限公司	6,903,800	6,904	
9	宁波金田铜业(集团)股份有限公司	6,443,412	6,443	
10	天津凤军金属制品有限公司	6,052,437	6,052	
	Top 10 combined	124,152,012	124,152	
	Chiho Tiande 976 HK		58,752	
	Total Scrap Import in China		420,000	
	Top 10 company market share		30%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1254229

Total scrap import data

http://bbs.cnal.com/thread-14314-1-1.html

#### October 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)	进口量(吨)	
1	台州齐合天地金属有限公司	31,327,306	31,327	<= Chiho Tiande 976 HK
2	齐合天地(宁波)再生金属有限公司	12,438,703	12,439	<= Chiho Tiande 976 HK
3	宁波涵盈金属工业有限公司	8,797,535	8,798	
4	广州恒通和顺进出口有限公司	8,790,994	8,791	
5	深圳市科澳实业有限公司	7,879,443	7,879	
6	中山市恒通进出口有限公司	7,783,622	7,784	
7	佛山市翔澳废旧五金加工利用有限公司	7,705,800	7,706	
8	东营方圆有色金属有限公司	7,569,636	7,570	
9	广东恒通合力进出口贸易有限公司	6,850,132	6,850	
10	天津凤军金属制品有限公司	6,608,451	6,608	
	Top 10 combined	105,751,622	105,752	
	Chiho Tiande 976 HK		43,766	
	Total Scrap Import in China		380,000	
	Top 10 company market share		28%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1266107

Total scrap import data

http://www.customs.gov.cn/publish/portal0/tab400/module15677/info324596.htm

#### November 2011

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)	进口量(吨)	
1	台州齐合天地金属有限公司	36,068,494	36,068	<= Chiho Tiande 976 HK
2	齐合天地(宁波)再生金属有限公司	19,974,319	19,974	<= Chiho Tiande 976 HK
3	佛山市翔澳废旧五金加工利用有限公司	9,013,981	9,014	
4	宁波涵盈金属工业有限公司	8,076,769	8,077	
5	宁波金田铜业(集团)股份有限公司	7,791,786	7,792	
6	肇庆市盛林再生资源有限公司	7,001,984	7,002	
7	清远华恒进出口贸易有限公司	6,951,160	6,951	
8	中山市恒通进出口有限公司	6,900,830	6,901	
9	东营方圆有色金属有限公司	6,009,703	6,010	
10	山东天圆铜业有限公司	5,848,239	5,848	
	Top 10 combined	113,637,265	113,637	
	Chiho Tiande 976 HK		56,043	
	Total Scrap Import in China		430,000	
	Top 10 company market share		26%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1286883

Total scrap import data

 $\underline{http://www.customs.gov.cn/publish/portal0/tab400/module15677/info337885.htm}$ 

#### December 2011

Rank 排名	Name 企业名称	Import volume (kg) 进口量(千克)	Import volume (tons) 进口量(吨)	
1	台州齐合天地金属有限公司	46,068,720	46,069	<= Chiho Tiande 976 HK
2	齐合天地(宁波)再生金属有限公司	18,858,334	18,858	<= Chiho Tiande 976 HK
3	清远华恒进出口贸易有限公司	12,673,070	12,673	
4	东营方圆有色金属有限公司	11,671,689	11,672	
5	宁波涵盈金属工业有限公司	9,673,792	9,674	
6	宁波金田铜业(集团)股份有限公司	7,748,324	7,748	
7	肇庆市盛林再生资源有限公司	7,700,800	7,701	
8	台州长青金属有限公司	6,942,262	6,942	
9	佛山市翔澳废旧五金加工利用有限公司	6,884,156	6,884	
10	山东天圆铜业有限公司	6,789,278	6,789	
	Top 10 combined	135,010,425	135,010	
	Chiho Tiande 976 HK		64,927	
	Total Scrap Import in China		450,000	
	Top 10 combined market share		30%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1305860

Total scrap import data

 $\underline{http://www.customs.gov.cn/publish/portal0/tab400/module15677/info348299.htm}$ 

2012

#### January 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)		
1	台州齐合天地金属有限公司	21,794,318	21,794	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	10,391,413	10,391	
3	齐合天地(宁波)再生金属有限公司	8,412,092	8,412	<= Chiho Tiande 976 HK
4	宁波金田铜业(集团)股份有限公司	8,127,200	8,127	
5	广东恒通合力进出口贸易有限公司	7,826,940	7,827	
6	宁波涵盈金属工业有限公司	6,592,522	6,593	
7	佛山市翔澳废旧五金加工利用有限公司	5,310,684	5,311	
8	佛山市三水友恒再生资源有限公司	5,255,400	5,255	
9	天津恒丰运业金属制品有限公司	5,136,400	5,136	
10	佛山市衡和进出口贸易有限公司	3,850,481	3,850	
	Top 10 combined	82,697,450	82,697	
	Chiho Tiande 976 HK		30,206	
	Total Scrap Import in China	n China 230,000		
	Top 10 company market share 36%			

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1359597

Total scrap import data

http://www.chinania.org.cn/html/hangyetongji/chanyeshuju/2012/0213/5298.html

#### February 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)		
1	台州齐合天地金属有限公司	27,569,400	27,569	<= Chiho Tiande 976 HK
2	宁波金田铜业(集团)股份有限公司	13,151,292	13,151	
3	齐合天地(宁波)再生金属有限公司	12,806,411	12,806	<= Chiho Tiande 976 HK
4	佛山市翔澳废旧五金加工利用有限公司	12,036,750	12,037	
5	东营方圆有色金属有限公司	11,736,928	11,737	
6	广东恒通合力进出口贸易有限公司	9,763,490	9,763	
7	佛山市三水友恒再生资源有限公司	9,329,840	9,330	
8	宁波涵盈金属工业有限公司	9,011,133	9,011	
9	肇庆市盛林再生资源有限公司	8,189,511	8,190	
10	天津恒丰运业金属制品有限公司	7,128,739	7,129	
	Top 10 combined	120,723,494	120,723	
	Chiho Tiande 976 HK		40,376	
	Total Scrap Import in China		400,000	
	Top 10 company market share		30%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1359597

Total scrap import data

http://www.chinania.org.cn/html/hangyetongji/chanyeshuju/2012/0410/6870.html

#### March 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)		
1	台州齐合天地金属有限公司	32,318,491	32,318	<= Chiho Tiande 976 H
2	宁波金田铜业(集团)股份有限公司	17,195,898	17,196	
3	宁波涵盈金属工业有限公司	17,107,472	17,107	
4	东营方圆有色金属有限公司	15,381,912	15,382	
5	佛山市翔澳废旧五金加工利用有限公司	10,060,246	10,060	
6	广东恒通合力进出口贸易有限公司	9,514,526	9,515	
7	肇庆市盛林再生资源有限公司	8,026,039	8,026	
8	广州市昊昕进出口贸易有限公司	8,015,305	8,015	
9	山东天圆铜业有限公司	7,694,663	7,695	
10	台州长青金属有限公司	6,920,073	6,920	
	Top 10 combined	132,234,625	132,235	
	Chiho Tiande 976 HK		32,318	
	Total Scrap Import in China		430,000	
	Top 10 company market share		31%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1359597

Total scrap import data

http://www.chinania.org.cn/html/hangyetongji/chanyeshuju/2012/0410/6870.html

July 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)		
1	台州齐合天地金属有限公司	54,119,490	54,119	<= Chiho Tiande 976 HK
2	宁波涵盈金属工业有限公司	15,672,594	15,673	
3	东营方圆有色金属有限公司	14,538,244	14,538	
4	宁波金田铜业(集团)股份有限公司	12,870,960	12,871	
5	佛山市翔澳废旧五金加工利用有限公司	10,269,995	10,270	
6	齐合天地(宁波)再生金属有限公司	10,261,854	10,262	<= Chiho Tiande 976 HK
7	肇庆市盛林再生资源有限公司	7,835,954	7,836	
8	天津凤军金属制品有限公司	7,455,708	7,456	
9	沈阳星河铜业有限公司	6,569,040	6,569	
10	中山市恒通进出口有限公司	6,141,630	6,142	
	Top 10 combined	145,735,469	145,735	
	Chiho Tiande 976 HK		64,381	
	Total Scrap Import in China		430,000	
	Top 10 company market share		34%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1434021

Total scrap import data

http://www.chinania.org.cn/html/hangyetongji/chanyeshuju/2012/0810/9204.html

#### August 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)		
1	台州齐合天地金属有限公司	57,653,742	57,654	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	17,302,549	17,303	
3	清远华恒进出口贸易有限公司	13,512,437	13,512	
4	宁波金田铜业(集团)股份有限公司	13,248,416	13,248	
5	佛山市翔澳废旧五金加工利用有限公司	12,605,086	12,605	
6	宁波涵盈金属工业有限公司	10,006,490	10,006	
7	齐合天地(宁波)再生金属有限公司	8,615,851	8,616	<= Chiho Tiande 976 HK
8	肇庆市盛林再生资源有限公司	8,226,363	8,226	
9	广州市昊昕进出口贸易有限公司	8,163,634	8,164	
10	营口杰诺瑞尔实业有限公司	6,981,145	6,981	
	Top 10 combined	156,315,713	156,316	
	Chiho Tiande 976 HK		66,270	
	Total Scrap Import in China		440,000	
	Top 10 company market share		36%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1450476

Total scrap import data

http://www.chinania.org.cn/html/hangyetongji/chanyeshuju/2012/0910/9678.html

#### September 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)		
1	台州齐合天地金属有限公司	49,664,022	49,664	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	19,019,599	19,020	
3	宁波涵盈金属工业有限公司	15,250,378	15,250	
4	宁波金田铜业(集团)股份有限公司	13,459,197	13,459	
5	清远华恒进出口贸易有限公司	10,164,025	10,164	
6	广东恒通合力进出口贸易有限公司	10,139,778	10,140	
7	齐合天地(宁波)再生金属有限公司	9,819,593	9,820	<= Chiho Tiande 976 HK
8	山东天圆铜业有限公司	8,953,945	8,954	
9	广州市昊昕进出口贸易有限公司	8,130,800	8,131	
10	天津亚铜钢铁有限公司	7,750,963	7,751	<= CMR 773 HK
	Top 10 combined	152,352,300	152,352	
	Chiho Tiande 976 HK		59,484	
	Total Scrap Import in China		460,000	
	Top 10 company market share		33%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1467753

Total scrap import data

 $\underline{http://www.customs.gov.cn/publish/portal0/tab400/module15677/info391653.htm}$ 

#### October 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量(千克)		
1	台州齐合天地金属有限公司	41,657,151	41,657	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	16,904,239	16,904	
3	宁波金田铜业(集团)股份有限公司	12,957,496	12,957	
4	齐合天地(宁波)再生金属有限公司	12,939,817	12,940	<= Chiho Tiande 976 HK
5	山东天圆铜业有限公司	10,897,013	10,897	
6	清远华恒进出口贸易有限公司	9,978,257	9,978	
7	广州市昊昕进出口贸易有限公司	8,886,575	8,887	
8	营口杰诺瑞尔实业有限公司	8,747,149	8,747	
9	中山市恒通进出口有限公司	8,603,810	8,604	
10	肇庆市盛林再生资源有限公司	8,504,251	8,504	
	Top 10 combined	140,075,758	140,076	
	Chiho Tiande 976 HK		54,597	
	Total Scrap Import in China		390,000	
	Top 10 company market share		36%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1487387

Total scrap import data

http://www.customs.gov.cn/publish/portal0/tab400/module15677/info396980.htm

#### November 2012

Rank	Name	Import volume (kg)	Import volume (tons)	
排名	企业名称	进口量 (千克)	进口量(吨)	
1	台州齐合天地金属有限公司	34,688,047	34,688	<= Chiho Tiande 976 HK
2	东营方圆有色金属有限公司	20,532,042	20,532	
3	齐合天地(宁波)再生金属有限公司	17,486,727	17,487	<= Chiho Tiande 976 HK
4	清远华恒进出口贸易有限公司	13,218,062	13,218	
5	广州市昊昕进出口贸易有限公司	11,105,248	11,105	
6	宁波金田铜业(集团)股份有限公司	10,757,256	10,757	
7	肇庆市盛林再生资源有限公司	10,743,779	10,744	
8	山东天圆铜业有限公司	8,512,615	8,513	
9	天津博瑞特金属制品有限公司	8,133,868	8,134	
10	沈阳星河铜业有限公司	6,595,037	6,595	
	Top 10 combined	141,772,681	141,773	
	Chiho Tiande 976 HK		52,175	
	Total Scrap Import in China		450,000	
	Top 10 company market share		32%	

Source: Top 10 importer

http://www.asianmetal.cn/news/viewNews.am?newsId=1504230

Total scrap import data

http://www.customs.gov.cn/publish/portal0/tab400/module15677/info403744.htm

#### **APPENDIX II**

### **Supporting Data for Fictitious Financials**

#### **REVENUES**

All figures are in USD	2006	2007	2008	2009	2010	2011	5yr CAGR
Steel Dynamics	-	-	\$3,692.4	\$1,682.1	\$3,179.0	\$4,152.5	3.0%
<b>Commercial Metals</b>	\$1,502.7	\$1,800.6	\$2,189.7	\$709.0	\$1,316.0	\$1,830.0	4.0%
Schnitzer Steel	\$1,406.8	\$2,089.2	\$3,062.8	\$1,507.7	\$1,979.8	\$3,070.0	16.9%
TMS Int'l	\$1,375.6	\$1,670.0	\$2,982.9	\$1,298.3	\$2,030.6	\$2,661.5	14.1%
Metalico	\$207.7	\$334.2	\$818.2	\$291.7	\$553.3	\$660.9	26.1%
PSC Metals	\$710.1	\$834.1	\$1,243.0	\$384.0	\$725.0	\$1,095.0	9.0%
Sims	\$2,787.0	\$4,711.7	\$7,331.1	\$6,971.1	\$6,316.2	\$9,498.3	27.8%
Chiho-Tiande	-	\$230.5	\$321.7	\$301.4	\$760.0	\$1,257.0	52.8%
CMR	\$140.4	\$249.0	\$838.2	\$1,167.9	\$2,883.9	\$6,677.3	116.5%

Sources: Company Filings

#### **EBITDA**

All figures are in USD	2006	2007	2008	2009	2010	2011	5yr CAGR
Steel Dynamics	1	-	\$186.1	\$100.9	\$121.7	\$128.4	-11.6%
<b>Commercial Metals</b>	\$135.9	\$129.5	\$164.8	(\$62.8)	\$27.2	\$56.0	-16.3%
Schnitzer Steel	\$143.6	\$187.6	\$387.2	\$48.2	\$157.0	\$214.4	8.4%
TMS Int'l	\$91.0	\$92.4	\$103.2	\$86.0	\$119.9	\$132.7	7.8%
Metalico	\$24.6	\$37.2	\$26.5	\$28.6	\$53.0	\$49.3	14.9%
PSC Metals	\$21.8	\$27.9	\$122.0	(\$36.0)	\$23.0	\$26.0	3.5%
Sims	\$251.8	\$379.2	\$644.2	\$135.1	\$267.4	\$390.1	9.2%
Chiho-Tiande	ı	\$13.7	\$6.6	\$28.3	\$64.4	\$54.1	41.1%
CMR	\$14.6	\$29.1	\$59.2	\$94.3	\$142.3	\$236.6	74.5%

Sources: Company Filings

# **Capital Expenditure as a % of Sales**

	2006	2007	2008	2009	2010	2011
<b>Commercial Metals</b>	1.1%	1.4%	2.4%	3.0%	0.4%	0.4%
Schnitzer Steel	3.8%	2.0%	1.5%	2.7%	2.7%	2.9%
TMS Int'l	4.1%	3.3%	2.1%	2.9%	2.0%	3.1%
Metalico	4.8%	3.5%	1.4%	1.0%	1.0%	4.0%
PSC Metals	ı	3.2%	3.1%	3.4%	2.5%	2.1%
Sims	2.0%	1.6%	1.7%	2.2%	1.6%	1.6%
Chiho-Tiande	ı	1.7%	1.1%	0.5%	1.3%	1.5%
CMR	0.9%	3.0%	1.5%	1.0%	1.2%	0.3%

Sources: Company Filings

	Revenue per Employee									Employe	e Count		
All figures are in USD	2006	2007	2008	2009	2010	2011	20	06	2007	2008	2009	2010	2011
Steel Dynamics			\$1,758,286	\$890,000	\$1,382,174	\$1,661,000	-		-	2100	1890	2300	2500
<b>Commercial Metals</b>	\$1,091,285	\$1,229,078	\$1,011,876	\$428,658	\$879,679	\$1,462,830	1,3	77	1,465	2,164	1,654	1,496	1,251
PSC Metals		\$768,756	\$1,320,935	\$451,234	\$772,921	\$884,491	1,0	75	1,300	1,524	1,325	1,491	2,161
Schnitzer Steel	\$1,308,635	\$1,607,077	\$2,009,711	\$1,137,853	\$1,327,814	\$1,420,639	2,4	.00	2,555	3,000	3,200	3,200	4,000
TMS Int'l	\$573,166	\$653,639	\$994,304	\$405,731	\$634,572	\$665,368	4	57	391	612	593	658	782
Metalico	\$454,385	\$854,711	\$1,336,920	\$491,961	\$840,810	\$845,150	-		1,085	941	851	938	1,238
Sims	\$886,441	\$1,376,493	\$1,224,908	\$1,259,909	\$1,124,281	\$1,520,216	3,1	44	3,423	5,985	5,533	5,618	6,248
Chiho-Tiande	•	\$230,487	\$146,910	\$118,960	\$181,862	\$251,252	-		1,000	2,190	2,534	4,179	5,003
CMR		-	\$1,764,618	\$2,919,800	\$5,767,861	\$11,128,866	•		•	475	400	500	600

Sources: Company Filings

			EBITDA pei	r Employee	)		Employee Count				•	
All figures are in USD	2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
Steel Dynamics	-	-	\$88,638	\$53,386	\$52,913	\$51,360	-	-	2100	1890	2300	2500
<b>Commercial Metals</b>	\$98,707	\$88,362	\$76,169	(\$37,940)	\$18,195	\$44,732	1,377	1,465	2,164	1,654	1,496	1,251
PSC Metals	\$133,565	\$144,299	\$254,064	\$36,378	\$105,275	\$99,222	1,075	1,300	1,524	1,325	1,491	2,161
Schnitzer Steel	\$37,910	\$36,157	\$34,393	\$26,877	\$37,475	\$33,184	2,400	2,555	3,000	3,200	3,200	4,000
TMS Int'l	-	\$25,736	\$129,649	(\$42,303)	\$24,520	\$21,002	457	391	612	593	658	782
Metalico	\$53,862	\$95,171	\$43,366	\$48,214	\$80,540	\$63,040	-	1,085	941	851	938	1,238
Sims	\$80,084	\$110,767	\$107,632	\$24,422	\$47,603	\$62,437	3,144	3,423	5,985	5,533	5,618	6,248
Chiho-Tiande	-	-	-	\$11,151	\$15,419	\$10,808	-	1,000	2,190	2,534	4,179	5,003
CMR	-	-	\$124,542	\$235,845	\$284,544	\$394,265	-		475	400	500	600

Sources: Company Filings

#### **Inventory Turnover**

All figures in Days	2006	2007	2008	2009	2010	2011				
Chiho-Tiande	-	66	60	178	118	108				
CMR	18	23	12	22	21	16				
Sims Metal	30	27	39	41	36	39				
PSC Metals	33	31	23	58	39	43				
Metalico	39	46	64	64	48	50				

Sources: Company Filings

**Return on Capital** 

	2006	2007	2008	2009	2010	2011
CMR	13%	12%	15%	13%	11%	16%
Chiho-Tiande		11%	-22%	32%	11%	2%
Metalico	11%	7%	5%	-1%	5%	5%
Sims	18%	15%	15%	0%	3%	4%
PSC Metals			24%	-12%	2%	2%

Sources: Company Filings

Return on Capital calculation equals Net Income divided by the sum of Total Common Equity, Debt and Discounted Bills

#### **APPENDIX III**

#### 2012 Management Presentation – Slide Excerpt

# **Company Overview**

# A Pioneer in China Green Renewable Economy, Only Listed Metal Recycler in Asia

### Largest metal recycler in China

- Revenue of 2011: HKD 52bn
- 2011 Capacity: 4.9 million tons
- First mover in scale operation with well-established national network (Southern, Eastern, Northern and Central China)
- Quality customer base and procurement network (U.S., Europe, Australia and Japan)
- Well connected road and water transportation, ports facilities

# A fast-growing & sustainable industry

- Renewable resources: energy saving and emission reduction
- Accelerating usage: driven by global environmental concern and supported by favorable policy & growing metal reserve

# Superior growth track record and prosperous outlook

- Strong execution capability evidenced by superior historical growth
- Revenue CAGR (2006-2011): 117%
- Earnings CAGR (2006-2011): 109%
- Capacity is expected to grow further in 2012.





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