





Each year, the William Hogan Memorial Lecture Award is given to the AISTech President's Award Breakfast keynote speaker. This award was established in 1990 in memory of the late Rev. William Hogan, director of Fordham University's Industrial Economics Research Institute. Rev. Hogan taught generations of students about industrial interdependence and the steel industry's vital role in economic development. Mr. Lourenco Goncalves, chairman and CEO of Cliffs Natural Resources Inc., presented the keynote address on Tuesday, 5 May, to a gathering of 1,014 industry colleagues at the AISTech 2015 President's Award Breakfast in Cleveland, Ohio, USA.



Good morning. Welcome to Cleveland! It's a pleasure to have you all here. This is the home of Cleveland Cliffs, a company that is 168 years old. We are currently in the process of building the next 100 years for Cliffs. It's a big honor to be part of this team, to be here with my friends Mario Longhi, Andrew Harshaw, Dick Teets and several others, and I really appreciate the invitation from AIST.

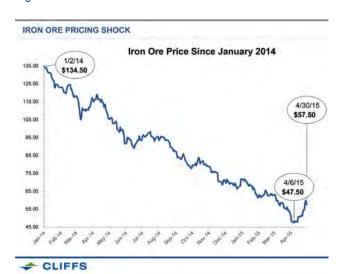
I'm going to be talking about things that, unfortunately, come back to our industry more often than we like. The good news is that we are always ready to fight, and I'm glad that we are at this point: addressing this problem, I believe, in a way that will put it to bed once and for all. The biggest destruction of value that has happened in an industry at any time is happening right here, right now, affecting all of us, our jobs, our industry. It is a problem that we must solve.

The Pricing Problem That problem is the iron ore n

That problem is the iron ore price. A reduction in prices has been happening since the beginning of 2014, when prices were at US\$134 per tonne (Figure 1). At the lowest point, at the beginning of April 2015, the price went down to US\$47.50. Although prices are back to US\$59 this morning, this drop in prices has happened in less than a year and a half. These things don't happen without a reason; they happen because they're provoked, and that's the point I'd like to make.

The world's raw production of iron ore, different from any other commodities, is concentrated in the hands of very few. In 2014, Rio Tinto produced 257 million tonnes of iron ore. BHP produced a little more than 200 million tonnes. Vale from Brazil, the biggest in the business, produced 314 million tonnes. Fortescue Metals Group (FMG) — the one that is new to the business in Australia and was built on land that was

Figure 1



not even considered for iron ore mining in the past due to the low iron ore content of their mines — produced 124 million tonnes in 2014. The next big one that people talk about in Australia, Roy Hill, has produced zero tonnes because it hasn't started yet. So the next big mine in Australia is Cliffs Natural Resources. Our mine there is producing only 11 million tonnes a year. The drop is enormous from what the big three — Rio Tinto, BHP and Fortescue — produce to number four. We used to be number five, but because several other mines, including the ones bigger than us, have shut down, we became number four.

What we are seeing now is unemployment and disarray in the overall economy, especially in Western Australia. However, that's not really the problem in my view and the view of several others. The problem is that, although these companies are producing a lot of iron ore and have been doing so for a long time, they are now announcing that they are going to produce even more (Table 1). Rio Tinto is saying it is going from 257 million tonnes to 360 million tonnes. BHP follows their lead and says it is going from 200 to 290 million tonnes. Vale is at 314 million tonnes, but it is planning to go to 460 million tonnes. FMG, while it came late, is growing as well, going to 160 million tonnes. Roy Hill, which is owned by Hancock Properties, the landlord of Rio Tinto, is going to start with 55 million tonnes. That number may look small, but 55

million tonnes is close to the entire iron ore production of the United States of America.

Table 1 — 2014 Iron Ore Production and Announced Future Production (in million tonnes)

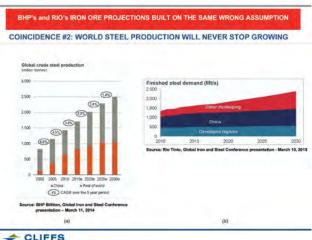
	2014 Actual	Announced
Roy Hill	0	55
FMG	124	165
Vale	314	460
ВНР	204	290
Rio Tinto	257	360

That's the picture. The industry is producing a lot of iron ore, and we are going to produce a lot more iron ore, so these particular analysts think the market should be able to absorb all that. That's wrong. BHP and Rio Tinto have been basing their forecasts on a bunch of mistakes and a few coincidences.

Coincidences and Wrong Assumptions

Let's talk about the first coincidence. Both of these companies believe that China will reach 1 billion tonnes of steel production. In March 2015, I was the International Keynote Speaker for the Global Iron Ore & Steel Conference in Perth, Australia, and I heard BHP saying, "We expect





China's crude steel production to peak at 1 billion tonnes." Fifteen minutes later, Rio Tinto said that China's steel production needs to rise only 1% a year for the country to reach 1 billion tonnes of crude steel output around 2030. It's a big coincidence that both companies are working with the same rounded number of 1 billion tonnes.

The other coincidence — and wrong assumption, in my opinion — is that the world's steel production will never stop growing (see Figure 2). The chart that BHP presented at the same conference a year ago in 2014 is the same is chart that Rio Tinto presented last month. If you look carefully, the charts may look a lot different, but they are exactly the same. China produces 1 billion tonnes (Figure 2a), and the world produces 2.5 billion tonnes (Figure 2b), and both groups continuously don't stop.

The third coincidence is that both BHP and Rio Tinto use the same consultant to formulate their Chinese steel forecast. Just a coincidence!

Both Rio Tinto's and BHP's China steel forecasts have been dismissed as propaganda. The number is being questioned by people who know what they are talking about, the latest one being the World Steel Association. Worldsteel has said that the 1-billion-tonne total output represents the absolute best-case scenario from an iron ore production perspective and would probably require China to increase its net export position for steel products internationally. That's a serious issue that affects us dearly.

The fourth and last coincidence is that BHP and Rio Tinto both have marketing offices in Singapore. Thus, the biggest supplier of iron ore to China is actually not Australia, but Singapore. Singapore buys from Australia. They say they are not in Singapore for tax reasons, and I believe it because I am a believer. If the Australian Taxation Office (ATO) still believes, then I believe

as well. This reminds me of Mark Zuckerberg's friend, Eduardo Saverin, a Brazilian like me, who came to the United States at the age of 11, grew up in Miami, Fla., attended Harvard and became a U.S. citizen. Three months before the IPO of Facebook, he decided his personality had everything to do with Singapore, so he decided to move to Singapore and surrender his American passport...but not for tax reasons.

Remember Benchmark Negotiation of Iron Ore?

I'd like to remind you that through 2009, iron ore was negotiated as a group; it was called the Benchmark Negotiation. Vale used to lead the negotiation in Europe, speaking on behalf of all three big producers. Rio Tinto used to lead the negotiation in Asia, mainly with Japan. Then China became bigger than Japan, and Baosteel was negotiating on behalf of the Chinese. Baosteel was unable to get a deal done with Rio Tinto for three years. So CISA, the Chinese Iron and Steel Association, took over as the negotiator on behalf of the Chinese. The head of the Shanghai office, Mr. Stern Hu, who reported directly to the executive vice president of iron ore for Rio Tinto at the time,

Sam Walsh, was accused of espionage and bribery. He was convicted and ended up in jail, where he still is as of now. This was a big issue — so big that they had to hire Dr. Henry Kissinger, the one who bridged the gap between China and the United States, to bridge Rio Tinto's relationship with China.

This situation was a lot more serious than it looks on the surface. So when I say that this is war, this is war, and we are on the side of the victim at this point. That's the reason we should behave as warriors, and that is exactly what we need to do to protect this industry.

Declining Steel Consumption in China Exports and Dumping

Now let's talk about the reality; let's talk about real numbers. Chinese steel consumption is forecast to decline (Figure 3). That's the data which Mr. Li Xinchuang, the vice chairman of CISA, presented in March 2015 at the same Global Iron Ore & Steel Conference in Australia, when Rio Tinto and BHP said the consumption would rise. Li's picture of Chinese steel consumption shows that it peaked in 2014 and then declines and continues to decline through 2030. So there's a huge gap between steel consumption and what Rio Tinto and BHP would like the world to believe in terms of their steel production. The only way China is going to produce all this steel is to export a lot of steel and dump that steel throughout the entire

world, affecting first Southeast Asia, Japan,
Korea, Taiwan, and neighboring countries. Eventually all this steel from
Southeast Asia and China will
end up here in the United
States.

The reality is that
China is facing
the prospect of
its slowest
growth
since



Figure 3

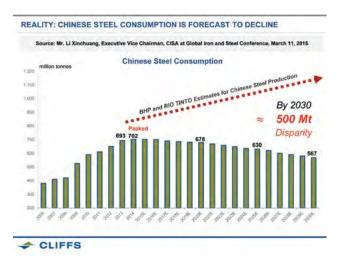
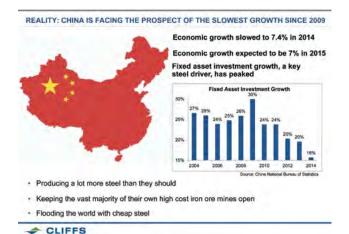


Figure 4



2009 (Figure 4). Economic growth in China slowed to 7.4% in 2014. At this point, that looks like a good number because the economic growth they had expected for this year is only 7%. Even more importantly, it will be not based on fixed asset growth, and that's the one that really matters in terms of steel consumption. That number peaked in 2009. So what we're seeing right now is that China is producing a lot more than they should be. That's a point I would like to call your attention to. They are keeping the vast majority of their own high-cost iron ore mines open — why? Because the Australians, mainly Rio Tinto, are basically enabling low-cost iron ore production in China to continue to operate because they supply the Chinese with cheap iron ore (Figure 5), allowing the Chinese to average down costs, keep their mines open, keep their steel mills running and produce steel that they don't need. And all that steel ends up here in the United States.

At the end of the day, all these things that are happening in iron ore affect our business here on a daily basis. China is flooding the world with cheap steel enabled by cheap iron ore from Australia.

China's Pollution Problem

On top of that is China's pollution problem, something we are starting to hear about but don't really appreciate the size of the problem. China needs to cut emissions by 50% to fall into "APEC Blue" sky, according to a Bloomberg article from 13 February. APEC Blue sky is like what we have in Cleveland, Ohio, where we have a very well-run and compliant steel mill in town and an airport near the town.

According to the Organisation for Economic Co-Operation and Development (OECD), pollution contributes to about 350,000 deaths per year in China. The population of the city of Cleveland is 390,000. In China, this is the equivalent of one city of Cleveland dies per year as a result of pollution-related causes. Keep in mind that 100% of the iron ore that Brazil and Australia send to China is low-quality sinter feed; there is no value-added, no pellets, just sinter feed — and sinter pollutes. The level of pollution that sinter causes, especially in China, where they have hundreds and hundreds of sinter plants around the Héibei Province, the Shandong Province and the Liáoníng Province, is unbearable.

That's what we call an uneven playing field. How can we make this rational and simple so that people will understand it? There is intense pollution in a country that values employment a lot more than pollution control; it is a lot more important to keep people employed than alive. Add that to currency manipulation and government subsidies, and at the end of the day, this is costing American jobs. We can't stand still and allow them to continue to do that unpunished.

Here in the United States, the manufacturing economy continues to be good. We continue to do a good job and be a contributor to this great country. When you look at U.S. demand and U.S. production, the numbers are very clear. We continue to grow; it

Cliffs' Strategy for the Future: Pellets

What about Cliffs? Since August 2014, Cliffs has been a differentiated supplier of value-added iron ore to U.S. steelmakers. Cliffs supplies pellets to North American steelmakers; they are custom-made for blast furnaces. This is completely different from what others do.

In our differentiated business model, we were the first ones to recognize that the seaborne iron ore market is cursed. We had no business staying there, so we are taking the company out of that business. We

Figure 5



is clear that demand continues to increase, but steel production is flat (Figure 6). Why is that? Because the imports come and take our business. So in the first quarter of 2015, import penetration was 34% — a lot more than the 26% that motivated Section 201 back in 2001-2002.



in the United States is a business as important as the integrated mills; we have been ignoring them for too long.

Cliffs is not only a differentiated supplier of value-added iron ore to the U.S. steelmakers (Table 2). We like to compare ourselves against the Australian seaborne iron ore miners in terms of the quality of the product. Instead of supplying the low-value-added sinter feed iron ore fines to sinter plants, we supply value-added pellets and flux pellets customized for each one of the blast furnaces we serve. Comparing end markets, the Australians supply China and other seaborne markets, while we are proud to supply the U.S. steelmakers. In terms of pricing, the Australian's

is all based on IODEX; Cliffs is involved in stable longterm contracts. This is a win-win situation in which we do well and our clients do well, and we believe we can continue to do that for an extended period of time.

Let me quickly mention the IODEX — a very strange index. Yesterday evening's headline announced, "Seaborne iron ore spot pricing rallies." They are saying that the seaborne iron ore price is rallying because the futures are saying that iron ore prices are going up. So, the price today is going up because the price in the future will go up. That's hard to understand. Actually, the reason is because prices have been artificially manipulated down, and reality is starting to prevail.

Conclusion

In summary, what we have in the world right now is one country really committed to sending a lot more cheap iron ore to another country that is eager to accept that cheap iron ore. We need to change this, and I believe we are in the process of changing it. This cheap iron ore is creating a lot of unemployment in Australia, a lot of jobs that are being transferred from the iron ore mines in Australia to the iron ore mines in China and to the steel mills in China, leaving behind a consequence of very, very heavy pollution that differentiates China from the rest of the civilized world — something that needs to be addressed. This cheap iron ore is then transformed into cheap steel that, boosted by a currency that is clearly manipulated and a lot of government subsidies, floods Southeast Asia first and then ends up here in the United States. That is what this iron ore war is all about. The consequence of the war is the subsidized steel that comes to the United States and steals the jobs of the iron and

steel industry in the United States. When you trace the cause of the disease, you can easily find the virus back in Australia. We are going to continue to fight the good fight, because in the end, good always prevails, and we are going to prevail. Thank you very much for your attention.

