Baffinland Iron Mines LP
Mary River Expansion Stage 3

Definitive Study Report

Section 15 – Market Analysis

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2017-05-01	0	Approved for Use	BIM	BIM	BIM	BIM
Date	**Rev.**	**Status**	**Prepared By**	**Checked By**	**Approved By**	**Approved By**

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15. Executive Summary

The current market for high grade iron ore is currently stronger relative to lower grade iron ore and it is forecast to continue as such into the medium term over the forecast period.

The quality of new material coming to the market from Australia continues to decline, as ore bodies deepen and age, offsetting the impact of announced supply increases from major iron ore miners. Additionally, it is assumed that a large proportion of the additional supply coming to market in the forecast period has been committed forward under long term contracts, and is already priced into the market.

Baffinland DSP and sinter fines are high quality products that are primarily targeted for sales to Atlantic basin customers. The first two shipping seasons have proven that the ores can be used productively in European blast furnaces and there is significant and sticky demand for the products.

Moreover, it has also shown that DSP does not perform as well as a complete pellet replacement and, to date, burden substitution has primarily been in place of lump ore. More product research and development is required if DSP is to be targeted further to capture a higher proportion of the pellet market.

Both DSP and SUSF have chemical and physical characteristics that are in strong demand in the current market. This is forecast to facilitate premium pricing for SUSF and enhanced VIU benefits in DSP pricing over the forecast period.

It is concluded that at 12Mtpa shipping the European market can absorb the full 12Mtpa, however, there will be associated price risk to capture this entire market share. Alternative marketing strategies are recommended that will, to an extent, mitigate the price risk, but will be highly dependent on freight into Asia being economical and Cape size ice-class vessels being sufficiently available.

15.1 Iron Ore Market Update

Global iron ore supply and demand in 2016 was approximately 2,000 million tonnes, of which 1,300 million tonnes was seaborne trade. The largest iron ore producing countries in the world continue to be Australia, Brazil and China. While Chinese production is largely captive to the local steel industry, Australian and Brazilian producers participate primarily in the global seaborne trade.

The four largest producers in the world (Vale, Rio Tinto, BHP Billiton and Fortescue) account for more than 80% of the seaborne trade and have been responsible for almost the entire new seaborne iron ore capacity that has come into the market in the past decade. Currently, there are a number of sizable supply additions coming into the market, however, those that are expected to enter have been also been fully anticipated for some years and will most likely replace lost production from those aging mines with declining quality. The below table shows iron ore supply projections in the period 2017-2019.

Table 15-1: Iron Ore Supply Projections for Period 2017-2019

Shipments (Mwmt) - yearly	CY14	CY15	CY16	CY17	CY18	CY19
Vale (ex-Samarco)	314	335	336	365	399	410
BHP Billiton (Pilbara)	242	261	260	271	278	290
Rio Tinto (Pilbara)	288	319	328	335	350	357
Fortescue	153	167	171	170	170	170
Anglo	41	52	56	58	62	64
Roy Hill	0	0	23	46	55	55
Samarco	25	25	1	0	6	18
Total	**1063**	**1158**	**1174**	**1245**	**1320**	**1365**
Growth – YoY	148	95	16	71	75	44
Growth - YoY	16%	9%	1%	6%	6%	3%

Source: J.P. Morgan estimates, Company data.

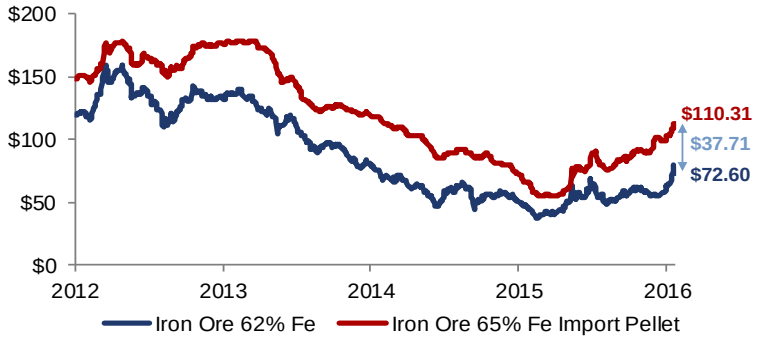
The above supply forecast implies a broadly balanced market in the short to medium term. There are several key projects, other than the Mary River Project, which will provide new iron ore supply. It is forecast that 120mt of iron ore will be added to the market by the majors in the next 2-3 years. These additions include Vale's Carajás S11D, which is expected to add 80-90 million tonnes to 2019, Roy Hill in Australia, a recently developed mine, which is expected to have an annual capacity of 55 million tonnes and Rio's Silvergrass complex, which is expected to add 20 million tonnes of capacity per annum. Additionally, BHPB is undertaking logistics debottlenecking, which is expected to add 30 million tonnes per annum throughput capacity, and to be considered is a possible return to the pellet market by Samarco.

Estimated year-on-year supply growth at 3-6% is relatively modest in comparison to the period 2014-2015, and is not expected to outstrip the growth in demand. However, it should also be noted that the supply from these projects will be primarily targeted for the Chinese market and will be largely comprised of fines.[1] Of note also is that the capital expenditure decisions associated with these mine expansions were taken several years ago and would not have been taken without the security of long term supply agreements/commitments, therefore, it is likely that the bulk of the supply that will enter the market should be assumed to be "pre-sold", and its entrance to the seaborne market will have limited impact on price because the availability of this volume is already priced into the market.

Additionally, a natural attrition (phasing out) of current supply is also taking place; and it is forecast that Vale Southern System production will continue its current aggregate quality (Fe%) quantity decline (10% y-o-y) rate over the period, and the average Fe% grade of Australian ore will continue to decrease. The continued decline in Fe % of Australian and Brazilian ores, and quantity of Brazilian material will continue to dampen 3-6% aggregate tonnage growth which is predicted over the period.

[1] Company reports and filings

15.1.1 Iron Ore Fines vs. Pellets Over Time (US$ / dmt)



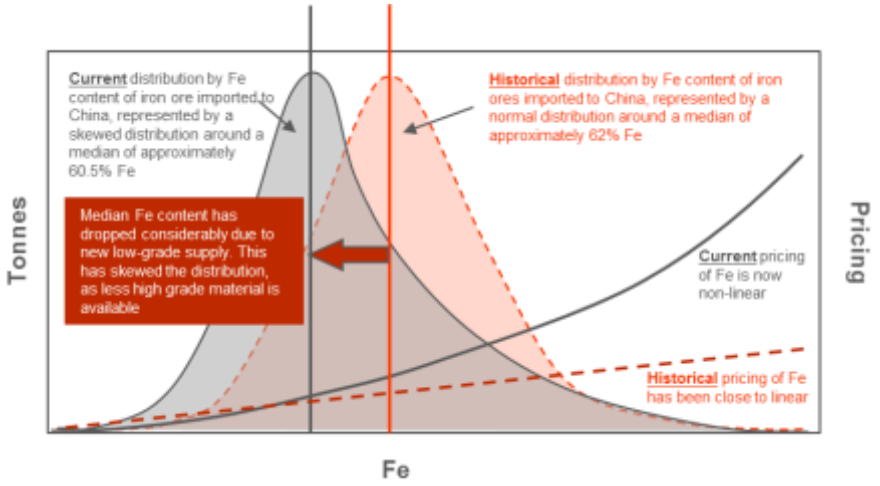
*Source: Bloomberg

Figure 15-1: Iron Ore 62% Fe CFR Tianjin Port China; 65% Fe China Import Pellet in US$ / Dry M

During the first half of 2016 the benchmark iron ore price experienced increased volatility, with most of this being driven from the corresponding volatility increases in the steel market, bullish demand sentiment due to improved steel margins in China, as well as, higher than expected crude steel production, despite announcements by Chinese officials regarding possible reductions in excess steelmaking capacity.

There is potentially a “perfect storm” for high grade iron ores brewing - Baffinland iron ore is high grade with low impurities.

From 2003-2008 the Chinese demand for ore was insatiable. The run up in demand consumed the “best” iron ore reserves of the Australian majors at a much faster rate than had been originally predicted. The reserves remaining today are lower in Fe and there has been a gradual but structural shift in Fe grade delivered to China. In conjunction with this, overall decline in Fe grade steel output has been increased, ultimately pushing aggregate demand for iron ore tonnes up. In the pricing of iron ore, Fe has traditionally been credited in a linear fashion. This was broadly representative of the value a steel maker could capture from the additional iron units with regard for alternative higher gangue material in the market. However, average grade decline, steel mill productivity pushes and increased environmental sensitivities now put a dis-incentive on the use of lower Fe iron ores. The phenomenon has permanently manifested itself in market pricing, and the Fe unit value curve has significantly steepened (see below chart).



* Source: ArcelorMittal Technical Marketing

Figure 15-2: Fe Unit Value Curve

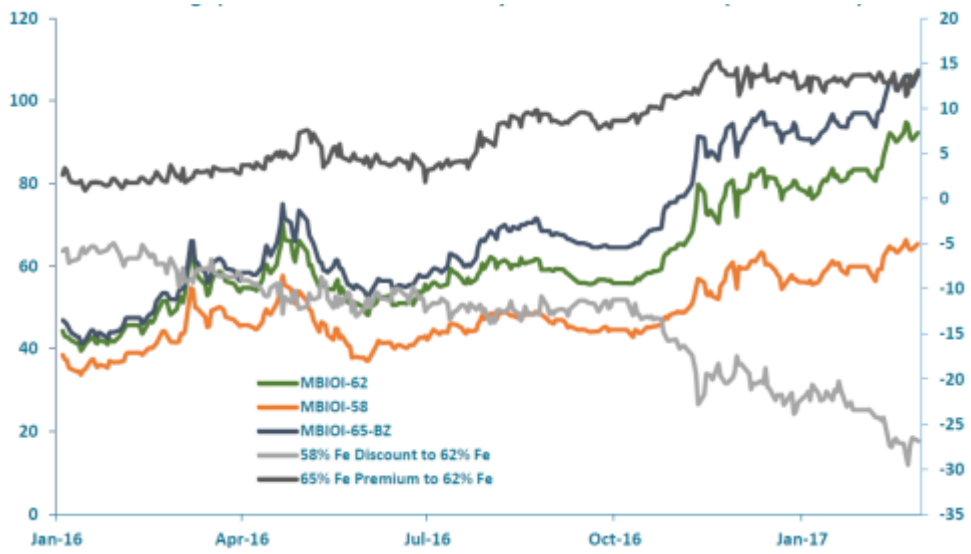
The “perfect storm” for high grade iron ore has hit the market in four phases. The first three phases of the storm are a function of shorter term market fundamentals; however, the fourth phase is indicative of a longer term structural change to the iron ore market.

Firstly, the second half of 2016 saw a rapid increase in metallurgical coal prices. This rise had a dramatic positive effect on the spread between the 65% and 62% indices. To reduce slag rate and capture the corresponding savings in fuel, steel mills sought to increase their percentage of higher grade material (lower gangue) charged to sinter plants and Blast Furnaces.

Secondly, a recovery in Chinese steel prices and profit margins steel exports, buoyed global steel production and re-fuelled the demand for iron ore. Strong demand side fundamentals continue to indicate that this trend will continue over the forecast period.

Thirdly, continued environmental pressure on Chinese steel mills heightens their appetite for high grade iron ore as steel production consolidation (closures) forces capacity utilisation improvements in the furnaces continuing to operate.

The fourth and final phase of the storm is a result of depletion of the global iron ore reserves.



*Source: Metal Bulletin

Figure 15-3: Widening Spreads between Three Key Iron Ore Fine Indices

15.2 Crude Steel Market Update

Primarily all the iron ore produced in the world today is used to manufacture crude steel for use in construction, infrastructure development, automotive production and the manufacturing, industrial and energy industries. World steel production has historically grown in line with world GDP. The trend in steel production is forecast to continue growing, and by 2020, global steel production is forecast to be 5.1% higher than the 1.65 bn tonnes produced in 2016. Over the last decade, China has accounted for the greatest increase in crude steel demand and China currently represents ~50% of global steel production. Chinese steel production grew at 1.6% in 2016[2]; this added the equivalent demand for 30 mt of iron ore.

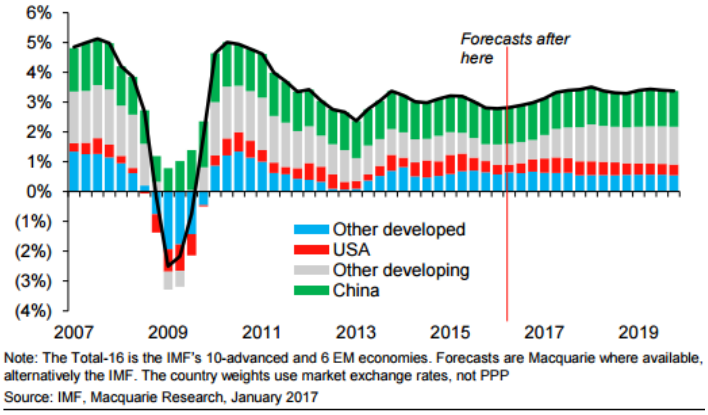
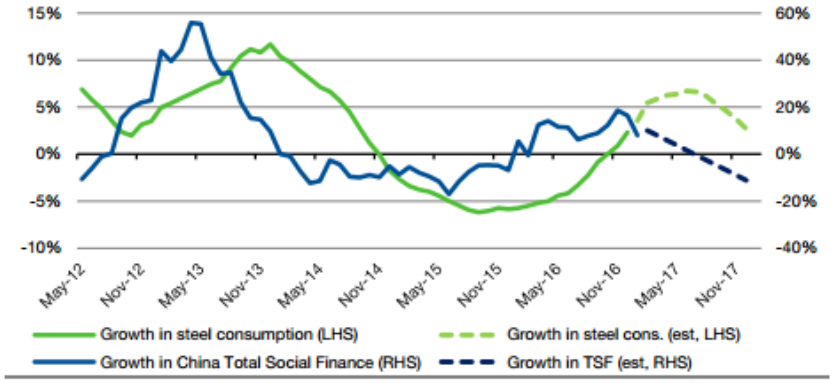


Figure 15-4: Global Real GDP Growth; Maquarie's Long Grindign Cycle Forecast

[2] World Steel Association - January 2017



Source: Liberum, Bloomberg

Figure 15-5: Forecast Growth in China Steel Consumption vs. Total Social Finance (12m Trailing)

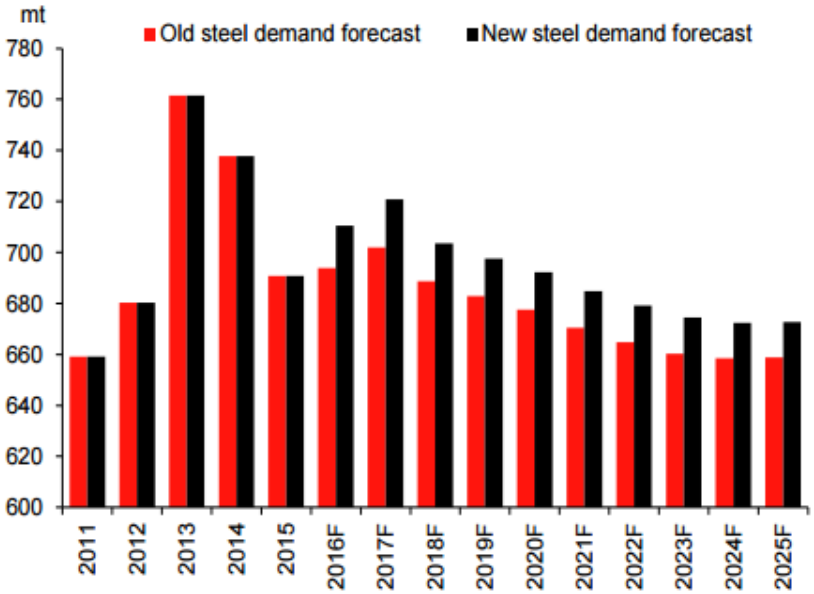


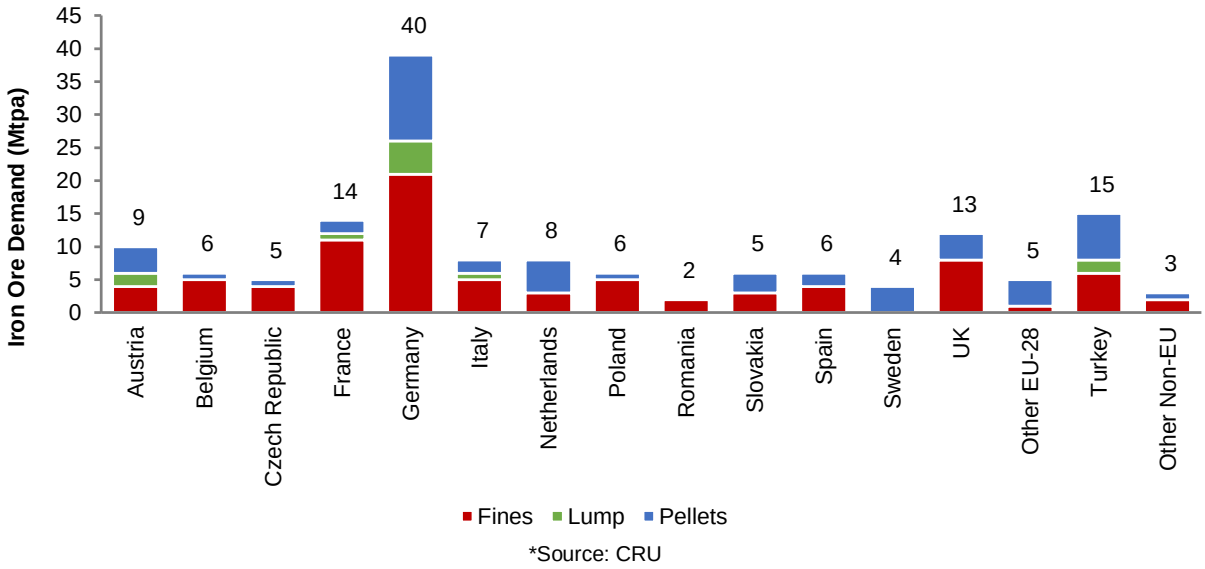
Figure 15-6: Old Steel vs. New Steel Demand Forecast

15.3 European Iron Ore Market

In Europe, the primary target market for Baffinland iron ore, the BOF, remains the dominant method of steelmaking and iron ore demand follows the steel market trends.

Europe requires 90 to 95 million tonnes of pig iron to feed its steel plants in periods of low demand and 110 to 120 million tonnes of pig iron during peak demand. This translates to iron ore demand of 145-150 to 175-190 million tonnes. This tonnage is a mixture of sinter feed, pellets and lump, which unlike Asia, Europe is limited in its flexibility (ability to switch between pellet or sinter production) in raw material inputs.

Iron ore demand in Europe in 2015 was ~150 Mt, with 84.3 Mt in fines (56%), 53.3 Mt in pellets (35%) and 11.9 Mt in lump (8%). Germany is the largest single user (27%), followed by Turkey (10%), France (9%) and the UK (9%).



*Source: CRU

Figure 15-7: European Ore Demand

The iron ore market in Europe differs from the Asian markets due to capacity and environmental constraints, which ultimately limits the amount of fines consumed by steel mills and results in higher demand for direct charge (lump and pellets). The supply of high quality lump ore to Europe has declined in recent years, causing many European steel makers to increase use of more expensive pellets.

The European market is mature with high levels of productivity subsequently requiring high proportions of direct charge material such as lump, pellets and steel scrap at the BOF vessel. The continued decline of good quality of the lump and fines supplied to Europe has coincided with a European steel industry-wide drive to reduce latent steelmaking capacity. The combined effect of which has increased demand for expensive, high quality pellets, as the steel mills sought to improve/maintain productivity whilst reducing overall steelmaking capacity footprint.

Iron ore lump is supplied to Europe from only Brazil, Africa and Canada (Baffinland), while pellets are imported from Brazil, Sweden, Canada, Russia and Ukraine. It is currently not competitive to ship Australian lump or fines to Europe versus their import alternates.

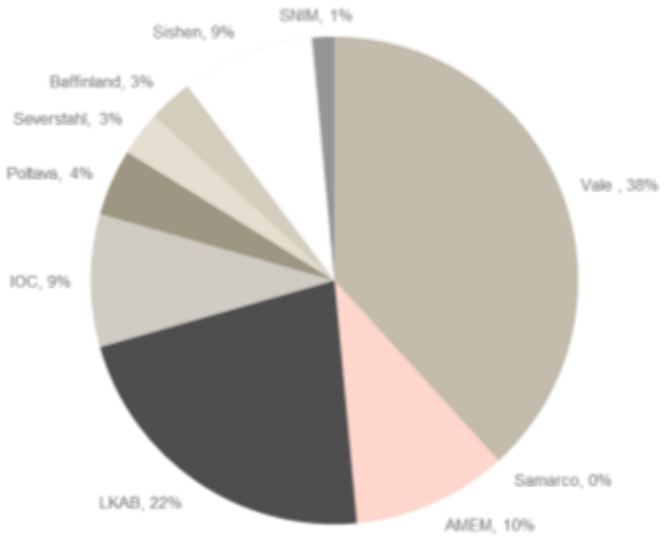


Figure 15-8: European Seaborne Lump and Pellet Supply

15.3.1 Pellet and Lump Supply Outlook for Europe

Pellet plants require large capital investments and have high variable operating cost components, resulting in lower economies of scale, thus the quantity forecast as new supply entering the market is low. The only realistic new (re)entrant to the pellet supply scene is the phased (re)start-up of Samarco's operations in Brazil. Following the tailings dam accident in November 2015, Samarco's pellet supply (15mt blast furnace pellet) has been absent from the market. A phased re-start of operations is planned for Q4 2017, but many regulatory hurdles must be cleared before this date becomes a reality.

Vale has latent pellet plant capacity, but availability of pellet feed in the areas of these plants continues to inhibit restarting. However, they have recently announced restarts of both the Sao Luis and Tubarao I and II plants.

The return of Australian lump ore to the European market is always a potential supply threat, however, the low Fe grade of these ores and, in particular, the high phosphorus content continues to restrict the quantities that European steel makers will use.

15.4 Sales of BIM Ore: Product, Price and Strategy

15.4.1 Value-in-Use (VIU)

Fundamental to marketing iron ores in Europe, is the concept of value-in-use (VIU). The use of all iron ores is a VIU driven decision by steel mills as they optimise overall cost of hot metal production. Hot metal VIU models present a direct comparison between a "known" material and "new" materials under a controlled set of conditions.

To assess the VIU of Baffinland DSP, a steel mill will take their steady-state/reference blast furnace (or sinter plant in the case of SUSF) operating conditions and model the impact of a

product substitution(s) on the overall cost of hot metal. Accordingly, a steel mill without lump in the BF burden would remove some pellet, or a combination of sinter and pellet, then model the impact of Baffinland DSP on hot metal costs; likewise, a steel mill with lump in the burden would remove all the lump, or a combination of lump, sinter and pellet, and model the impact on hot metal costs.

The outputs of the VIU model allow the mills to make the optimal purchase decisions for each specific BF based on prevailing market prices associated with each input variable. The VIU model will indicate to the steel mill the price at which the purchase decision should change, and when it is optimal to switch inputs, *i.e. change the buying decision*.

In the case of lump ore, the VIU model outputs guide steel mills purchasing decisions to the optimal charge mix between lump and pellets (assuming sinter is always maximised). The dynamic equilibrium of lump and pellet price premiums versus operational benefits in the BOF constantly shifts and sways as the market seeks to clear.

15.4.2 DSP - Quality

Demonstrated in the charts below, DSP has significant quality advantages relative to much of the competition in Europe. The extremely high iron content and low presence of deleterious elements in DSP (and SUSF) means that the potential demand for the material in Europe should continue to be high. There are very few higher-grade direct charge ores available in the market; consequently it is expected that European steel mills should prioritise DSP.

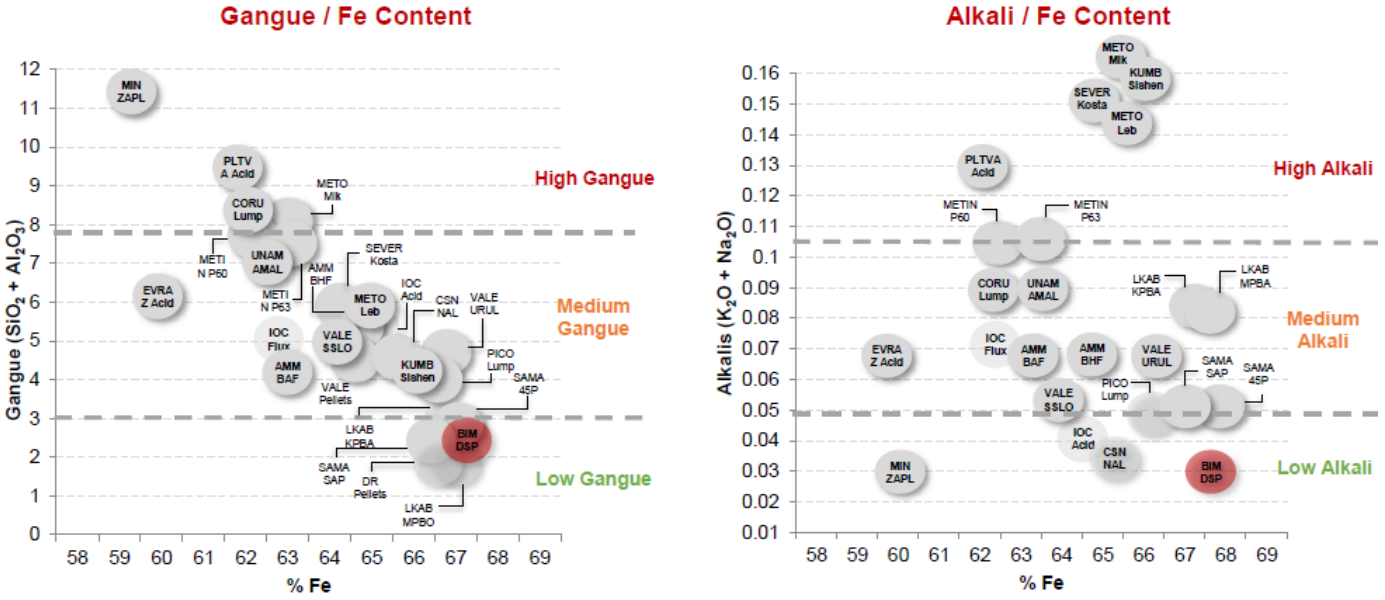


Figure 15-9: Significant Quality Advantages of DSP

15.4.2.1 DSP - Market Share and Product Placement

DSP currently occupies 3% of the total direct charge market in Europe. Following the planned expansion with DSP production at 9 mtpa, the market share would need to increase by a

further 10% to 13% in total. There is significant opportunity to increase market share by 10% but the increase will only be captured by displacing competing products, which will ultimately compete with pellets and potentially create price pressure on lump and pellet premiums.

Through the Early Revenue Phase (ERP) of production, market entry and acceptance has occurred with DSP and SUSF now established within the BOF and sinter burdens of major European steel mills. Initial market entry costs have been digested into the pricing and it is assumed that there is sufficient and substantial demand for both DSP and SUSF.

Additionally, the geographical proximity of Baffinland to the European market clearly demonstrates that Europe should continue to be the primary target market. However, as highlighted above, the European iron ore market is not predicted to grow significantly, so market share must be captured through alternative product displacement/substitution.

15.4.2.2 Displacement of steel making raw materials in Europe is a function of VIU.

This VIU assessment/displacement balance at high rates of production and shipping should create an inflection point for sales to fall logically out into the region of Japanese, Korean and Taiwanese markets (JKT). The geographic proximity of JKT to Australia, coupled with differences in the steelmaking process and average lump ore rates in BOF's, mean that the JKT VIU equation for DSP will be different to Europe. JKT steelmakers use much higher rates of lump ore and, therefore, are expected to attribute a higher VIU credit to DSP because DSP displaces pellets in the first instance. In the case of European steelmakers (relatively low lump rates) ore the DSP displaces other lump in the first instance.

The inflection point for sales to JKT comes when the delta between Milne to NW Europe freight versus Milne to JKT freight rate is less than the difference in VIU credit attributed to the material. For this reason freight rate differentials must constantly be monitored.

It is expected that the freight rate differential will consistently outweigh the VIU differential, therefore the primary target market for DSP will be Europe (Primary Sales Case), however, a (Secondary Sales Case) is also considered in case the inflection point is reached. Note that if developed and opened, the Northern Passage to Asia could offset this freight delta between markets.

Due to low VIU credits in China, it is not forecast that material from Baffinland will be sold to China.

15.4.2.3 DSP - Use to Date

Sales in the ERP have proven DSP as a partial pellet and as a lump replacement in the BOF. Over 3.5mt of DSP has been used in European Blast Furnaces throughout 2015 and 2016 with the operational and technical feedback confirming that DSP replaces lump in the burden and partially replaces pellets.

The usage rates of DSP across customers has varied from 100-350 kg/thm. This is consistent with the industrial trials held in 2008 which indicated DSP could be used at ~350 kg/thm.

Due to natural inherent variability of DSP, it is not considered that it could displace 100% of pellets in a blast furnace without presenting productivity losses, but, where users remained at the lower end of usage rates, it is thought that the unfamiliarity of BF operators using high lump ore rates could have been a contributory factor.

15.4.2.4 DSP - Pricing

DSP pricing methodology has been established in Europe. The price is linked to a percentage (%) of prevailing annual Blast Furnace pellet premiums. DSP is the first lump ore in the European iron ore market to achieve this direct link. Additionally, there is very little spot trade in pellets, therefore, the pricing is extremely illiquid and the price tenor seen in pellet supply agreements is usually 12 months.

The first two shipping seasons of DSP supply has seen the ore established with European steel makers burdens, and it is now possible to commence detailed technical evaluations of the products performance, not only to establish the behaviour of DSP in the burden, but also to begin to clarify whether there are complementary products already being used in European Blast Furnaces that marketing efforts should also be targeted at in order to enhance price realisation due to the specifics of that steel mill's VIU calculations.

15.4.3 SUSF - Quality

The overall high quality of SUSF puts the product in high demand. The entrance of S11D ore from Vale has meant a deterioration in quality of the fines being used by European mills. Although the Fe grade is higher than the Carajas product, alumina and phosphorus levels are elevated. The S11D coming to market in 2017 and 2018 will be approximately 0.10% P and this is expected to continue until at least 2020.

The low phosphorous and alumina in SUSF presents significant VIU benefits in the sinter plant and SUSF is expected to be a highly sought after product.

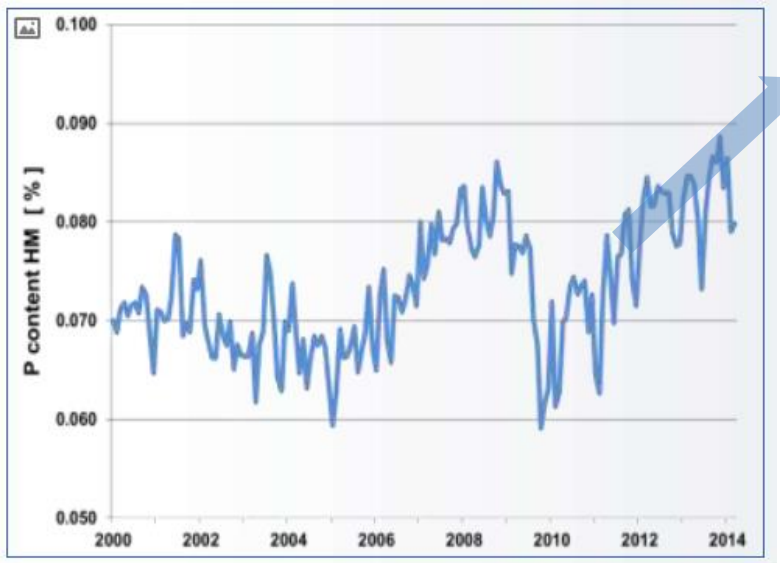


Figure 15-10

Source: Thyssen Krupp and ArcelorMittal estimates

The concept of adding an additional phosphorus premium into the pricing of SUSF has been established, and it is expected that this premium could increase in the coming years and could then be able to be extended to alumina levels. It can be seen from the chart below, SUSF has demonstrable high grade, low gangue quality which positions it extremely well relative to the competition.

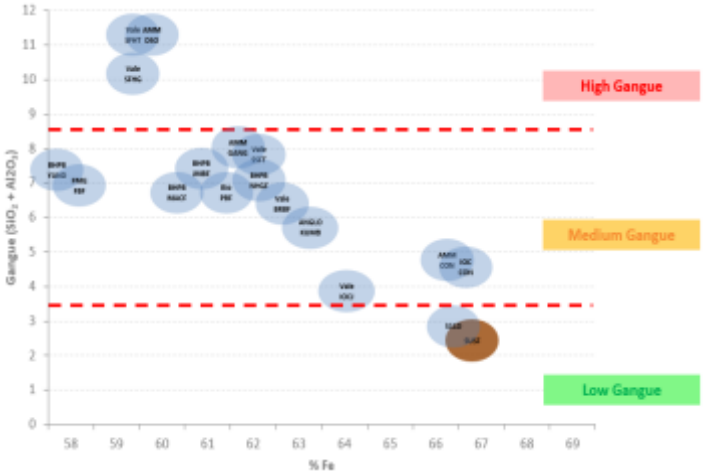


Figure 15-11

15.4.3.1 SUSF - Market Share and Product Placement

SUSF currently represents 0.8% of the market for sinter fines in the EU. With SUSF production at 3 mtpa, this market share will increase to 3.5%. The high quality of the material means it should be possible to capture the additional market share without any impact on pricing relative to the competition.

15.4.3.2 SUSF - Use to Date

The limited quantities of SUSF used in European sinter plants mean that operational data is limited, however it is known that the coarseness and high quality of the material bring significant benefits to sinter chemistry and plant productivity.

SUSF also has the added benefit of being approximately 30% magnetite. This brings substantial environmental and cost credits to SUSF when input to a VIU model.

15.4.4 SUSF - Pricing

Over 1mt of SUSF has been consumed in Europe through 2015 & 2016. In these two years of sales it has been possible to capture a VIU premium in pricing. This premium is added and above the 65% Fe Index.

Due to the chemistry and mineralogy of SUSF it is predicted that the current premium should increase over the forecast period.

15.4.5 Production Profile and Sales Plan(s)

Phase 2 production will ramp up in stages from 2018.

Table 15-2: Phase 2 Production

	Year		2018				2019				2020				2021			
	Quarter		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pre Feas Study	Mined Ore (as per mine plan)	Mt	1.3	1.3	1.3	1.3	1.3	1.8	2.4	2.5	2.5	2.5	2.8	3.0	3.0	3.0	3.0	3.0
	New Crushing & Screening Plant						CS											
	Road Transport	Mt	1.3	1.3	1.3	1.3	1.3	1.3	-	-	-	-	-	-	-	-	-	-
	Rail Transport	Mt	-	-	-	-	-	-	1.2	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Total Production	**Mt**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.2**	**2.4**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**
	Shipping Year Production	**Mtpa**			**5.0**				**5.0**				**11.4**				**12.0**	
	Calendar Year Production	**Mtpa**			**5.0**				**6.1**				**12.0**				**12.0**	

SALES AND MARKETING					Year 2017	Year 2018	Year 2019	Year 2020	Year 2021
Total Output				*wmt*	5.00	5.00	11.40	12.00	12.00
SUSF Output			25%	*wmt*	1.25	1.25	2.85	3.00	3.00
DSP Output			75%	*wmt*	3.75	3.75	8.55	9.00	9.00
DSP	67.80 %	Customer	Region						
		AMS	Europe	*wmt*	1.900	1.900	4.000	4.000	4.000
		TATA	Europe	*wmt*	0.075	0.075	0.500	0.700	0.700
		Rogesa	Europe	*wmt*	0.500	0.500	1.000	1.000	1.000
		TKS	Europe	*wmt*	1.000	1.000	1.500	1.500	1.500
		Salzgitter	Europe	*wmt*	0.100	0.100	0.700	0.700	0.700
		Voestalpine	Europe	*wmt*	0.100	0.100	0.300	0.500	0.500
		SSAB	Europe	*wmt*	--	--	--	--	--
		British Steel	Europe	*wmt*	0.075	0.075	0.250	0.300	0.300
					3.75	3.75	8.55	9.00	9.00
					OK	OK	OK	OK	OK
		TOTAL DSP SALES	Europe	*wmt*	3.75	3.75	8.55	9.00	9.00
			JKT	*wmt*	--	--	--	--	--
			China	*wmt*	--	--	--	--	--
			Americas	*wmt*	--	--	--	--	--
			Middle East	*wmt*	--	--	--	--	--

Figure 15-12: DSP - Sales Plan 1 - (EU Primary Target)

SALES AND MARKETING					Year 2017	Year 2018	Year 2019	Year 2020	Year 2021
Total Output				*wmt*	5.00	5.00	11.40	12.00	12.00
SUSF Output			25%	*wmt*	1.25	1.25	2.85	3.00	3.00
DSP Output			75%	*wmt*	3.75	3.75	8.55	9.00	9.00
DSP	67.80 %	Customer	Region						
		AMS	Europe	*wmt*	1.900	1.900	4.000	4.000	4.000
		TATA	Europe	*wmt*	0.075	0.075	0.500	0.500	0.500
		Rogesa	Europe	*wmt*	0.400	0.400	0.750	0.750	0.750
		TKS	Europe	*wmt*	1.000	1.000	1.000	1.000	1.000
		Salzgitter	Europe	*wmt*	0.100	0.100	0.600	0.600	0.600
		Voestalpine	Europe	*wmt*	0.100	0.100	0.300	0.500	0.500
		SSAB	Europe	*wmt*	--	--	--	--	--
		British Steel	Europe	*wmt*	0.075	0.075	0.300	0.300	0.300
		Ilva	Europe	*wmt*	--	--	0.150	0.300	0.300
		Nippon	JKT	*wmt*	0.100	0.100	0.500	0.500	0.500
		JFE	JKT	*wmt*	--	--	0.150	0.150	0.150
		POSCO	JKT	*wmt*	--	--	0.300	0.400	0.400
					3.75	3.75	8.55	9.00	9.00
					OK	OK	OK	OK	OK
		TOTAL DSP SALES	Europe	*wmt*	3.65	3.65	7.60	7.95	7.95
			JKT	*wmt*	0.10	0.10	0.95	1.05	1.05
			China	*wmt*	--	--	--	--	--
			Americas	*wmt*	--	--	--	--	--
			Middle East	*wmt*	--	--	--	--	--

Figure 15-13: DSP - Sales Plan 2 - (Secondary and Tertiary Target Markets)

SALES AND MARKETING					Year 2017	Year 2018	Year 2019	Year 2020	Year 2021
Total Output				*wmt*	5.00	5.00	11.40	12.00	12.00
SUSF Output			25%	*wmt*	1.25	1.25	2.85	3.00	3.00
SUSF	66.90 %	Customer	Region						
		AMS	Europe	*wmt*	0.600	0.600	1.400	1.500	1.500
		TATA	Europe	*wmt*	0.075	0.075	0.150	0.150	0.150
		Rogesa	Europe	*wmt*	0.200	0.200	0.300	0.300	0.300
		TKS	Europe	*wmt*	0.150	0.150	0.400	0.400	0.400
		Salzgitter	Europe	*wmt*	0.150	0.150	0.150	0.200	0.200
		Voestalpine	Europe	*wmt*	0.075	0.075	0.150	0.150	0.150
		SSAB	Europe	*wmt*	--	--	--	--	--
		British Steel	Europe	*wmt*	--	--	0.150	0.150	0.150
		Ilva	Europe	*wmt*	--	--	0.150	0.150	0.150
					1.25	1.25	2.85	3.00	3.00
	TOTAL SUSF		Europe	*wmt*	1.25	1.25	2.85	3.00	3.00
			JKT	*wmt*	--	--	--	--	--
			China	*wmt*	--	--	--	--	--
			Americas	*wmt*	--	--	--	--	--
			Middle East	*wmt*	--	--	--	--	--

Figure 15-14: SUSF - Sales Plan

15.4.6 Market Growth Opportunities (1) DR Segment

It is assumed that continued growth in the DRI production segment will also pull Atlantic BF pellet production into the DRI market. DR buyers pay a premium over the Blast Furnace Pellet premium for quality and to secure material versus the scrap alternate and, therefore, any tonne which a BF pellet producer can sell as DR pellet will move into the DR segment.

This market flow has two major benefits:

1. It creates further opportunity for DSP as in the BF pellet market.
2. The low gangue of DSP indicates it has potential for use in DR modules. The preferred technology capable of reducing DSP will be HYL as opposed to Midrex.

Some initial basket test results have proven that DSP has potential in this market, however, the performance is significantly lower that DR pellets and more work in close conjunction with a DRI producer will be required to prove the VIU of DSP.

15.4.7 Market Growth Opportunities (2) Great Lakes

The abundance of fine taconite ores in USA means US steel mills have traditionally run a burden practice of 100% pellets. There are some exceptions (AM Burns Harbor, USX Gary), but in general, BF burdens run a high percentage of pellets. Lump ore is not currently used in the BFs of the Great Lakes due to the quality, availability and disadvantageous logistics costs. Table 15-3 shows burden practice in selected North American blast furnaces:

Table 15-3: Burden Practice in selected North American Blast Furnaces

Steel Mill	Blast Furnace ID	Fluxed Pellet consumption (kg/nthm)	Acid Pellet Consumption (kg/nthm)	Sinter Consumption (kg/nthm)	Lump ore consumption (kg/nthm)
AM Dofasco	2	799	677	0	0
AM Dofasco	3	614	895	0	0
AM Dofasco	4	780	699	0	0
USX Hamilton	E	0	1500	0	11
USX Lake Erie	1	773	630	0	3
AK Steel, Dearborn	C	47	1538	0	0

To maintain an alternative sales outlet to the EU, there is potential market DSP in the Great Lakes. At lower mine production levels (~5 mtpa) the extra logistics and handling costs involved in delivery is expected to be a disincentive, however, as mine output increases, establishing an efficient, trusted supply route into the Great Lakes is recommended.

The closest Great Lakes customers (geographically) and, therefore, the primary target customers, are shown below:

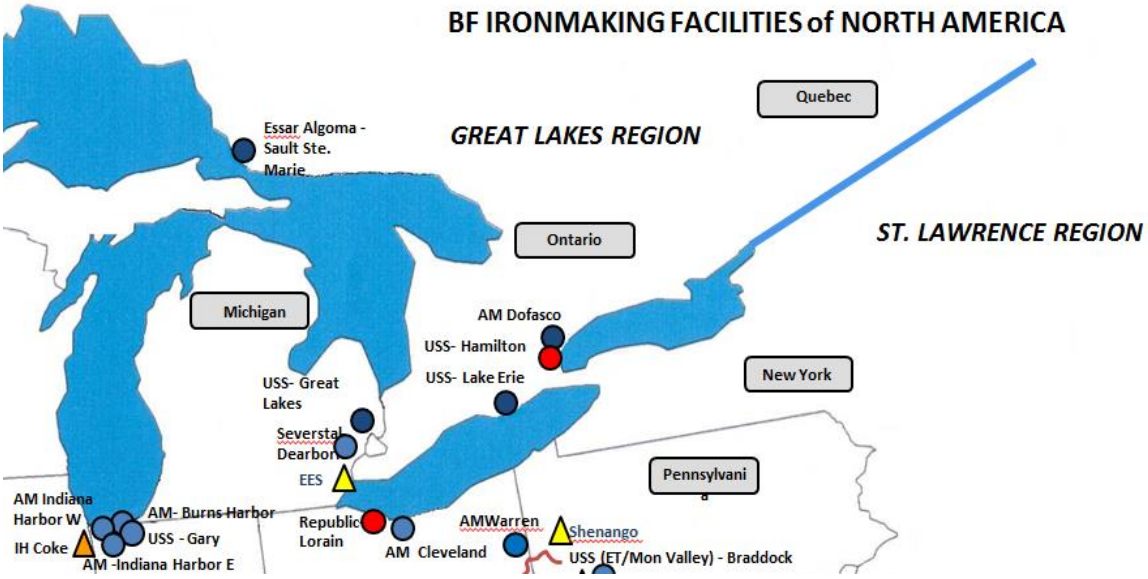


Figure 15-15: Primary Target Customers

The direct charge market in the Great Lakes are not expected to out-weigh the additional logistics cost involved in getting the material to the Lakes, but it is predicted that DSP could complement certain aspects of specific mill burdens.

15.4.8 Risks/Mitigations to 12mt Baffinland Sales

Capturing 13% market share in the European market will undoubtedly be accompanied by price risk as DSP seeks to displace other established ores, however, additional risks to pricing and marketing should also be considered:

15.4.8.1 *Risk: Short Delivery Window*

Blast furnaces don't respond well to variation, and there is a risk that demand for the ore will be impeded in Europe due to the high tonnes being shipped and invoiced over a short, pre-defined period. It is the preference of European steel mills to maintain a constant charge rate consistently over 12 months of the year and to also ensure working capital is minimised.

Mitigation: Consignment stocking arrangement in Europe. Further study work is being done on this topic.

15.4.8.2 *Risk: Pricing Period (QP) Exposure*

All tonnes are delivered in 90 days. This exposed Baffinland material to market pricing in ¼ of a 12 month period.

Mitigation: Operational hedge can be taken through customer contracts to evenly spread pricing period over longer period.

15.4.8.3 *Risk: Competition*

There is a risk of becoming embroiled in a price war with incumbent iron ore lump and pellet suppliers in Europe.

Mitigation: Continue to differentiate DSP into its own niche/segment using VIU positioning to sustain premias.

15.4.8.4 *Risk: Macroeconomic Risk to European Steel Market*

If steel demand contracts then high grade iron ore demand will follow. This will negatively impact pricing and underlying demand for both DSP and SUSF.

Mitigation: Limited.

15.4.8.5 *Risk: Predatory Buyer Behaviour*

This phenomenon has not been experienced in the first two years of product shipment to Europe, however, the risk remains that if other material quality improves relative to the current DSP, Baffinland will face predatory price behaviour. Sales to the European market are preferred to avoid the freight handicap which currently exists on Asian sales, however, in case the market becomes grossly oversupplied and limited sales alternatives, there is a risk that only the "Asian" FOB equivalent price is achievable from European buyers.

Mitigation: Continue development of the DR market segment and an alternative market in North America.

15.4.8.6 *Risk: Shipping*

Due to the nature of the operating environment, the critical mass of volume required to be moved in the tight shipping window, all shipping is and will need to continue to be done on a carefully planned CFR basis and sufficient capacity will need to be captured to ensure all tons are shipped in any given season. There is also the risk of limited cape size ice-class fleet availability.

Mitigation: Vessels need to be secured fixed under CoA and need to mitigate exposure to freight rates and bunkers through operational hedges and a variety of voyage contracts.