Baffinland Iron Mines LP
Mary River Expansion Stage 3

Definitive Study Report

Section 19 – Financial Analysis and Evaluation

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Date	**Rev.**	**Status**	**Prepared By**	**Checked By**	**Approved By**	**Approved By**
HATCH						

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1. Executive Summary

The objective of the analysis is to investigate value of the mine life project feasibility to increase production from 5 Mtpa (currently) to 12 Mtpa (planned) for the Mary River Project.

Average, undiscounted average unit cash flows for the life of mine are shown below. Working capital is excluded as it is negligible over the life of mine.

Table 1-1: Cash flow summary over life of mine

Cash flow summary, $US/t	Average, LoM
Revenue	$71.62
Operating costs	(18.06)
Freight and port charges	(6.14)
Royalties and overheads	(1.82)
EBITDA	45.60
Capital spending	(5.12)
EBITDA less Capital Spending	40.48

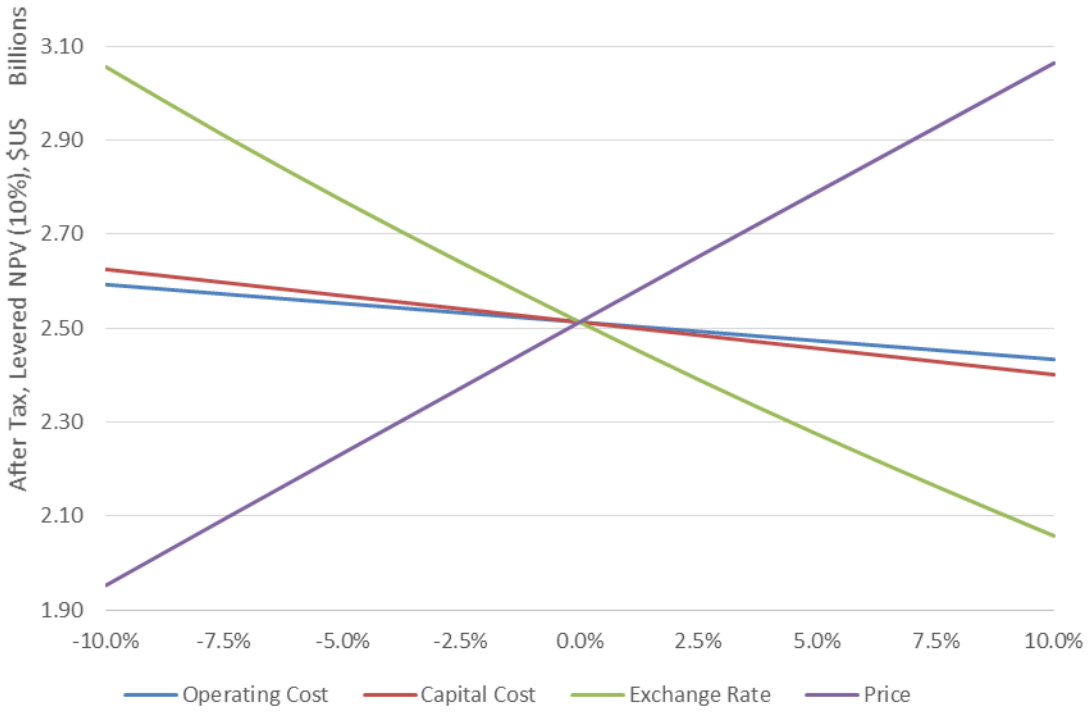
The resulting project net present value (NPV) is summarized in the tables below. NPVs include impact of pre-existing selling price, tax, royalties and financing supplied by Baffinland and included in their financial model.

Table 1-2: NPV summary, $US millions (excluding sunk costs)

Discount rate	Pre-tax unlevered	After-tax levered
7%	5,869	3,549
8%	5,233	3,156
10%	4,201	2,513

A sensitivity analysis was performed to examine the impact to after tax, levered NPV from changes in forecast benchmark price, exchange rate, capital costs and operating costs.

Figure 1-1: Net Present Value Sensitivity at 10% of After Tax, Levered Cash Flow



Benchmark prices which directly impact revenue are the largest sensitivity. Capital costs and operating costs are largely denominated in Canadian Dollars, while revenues are in US Dollars. Exchange rate showing the second largest sensitivity is therefore expected.

19. Financial Analysis

19.1 Introduction

This section covers the assumptions and results of the financial analysis for the Mary River Stage 3 expansion project. It includes estimates of:

- Quarterly and annual cash flows, including selling prices/revenues, operating costs, initial capital spending and sustaining capital
- Net present value (NPV) based on 7%, 8% and 10% weighted average cost of capital
- Sensitivity analysis

The objective of the analysis is to investigate value of the mine life project feasibility to increase production from 5 Mtpa (currently) to 12 Mtpa (planned) for the Mary River Project.

19.1 Model Setup and Key Assumptions

The financial analysis was completed based on a financial model provided by Baffinland for update.

The model was set up in 3 phases:

- Phases 1 and 2: a Baffinland forecast for its current, ongoing operations
- Phase 3: incremental production, from 2019 onwards

Some key assumptions are detailed below, with further details provided in the following sections.

- Total production from all phases (1-3): 12 Mtpa.
- Production, grade, stripping ratio an life of mine (LoM): as per material balances
- Units: All unit revenues and costs are given in $US/wmt unless otherwise noted
- Inflation: none, all estimates are in 2017 dollars.

19.2 Exchange Rate and Pricing

19.2.1 Exchange Rate

A Bloomberg exchange rate curve was used (April 4, 2017) for the financial analysis, as summarized in the table below.

Table 19-1: Exchange rate projections, Source: Bloomberg

Year	2017	2018	2019	2020	2021	2022+
$US:$C	0.752	0.755	0.761	0.766	0.771	0.775

19.2.2 Pricing

Iron ore is priced starting with the Consensus Economics forecast (Q1, 2017) for the "Platts IODEX 62% Fe CFR North China Midpoint Average" benchmark. A comparison of this curve with estimated prices realized by Baffinland is illustrated below alongside CRU forecast prices for the Atlantic blast furnace pellet premium.

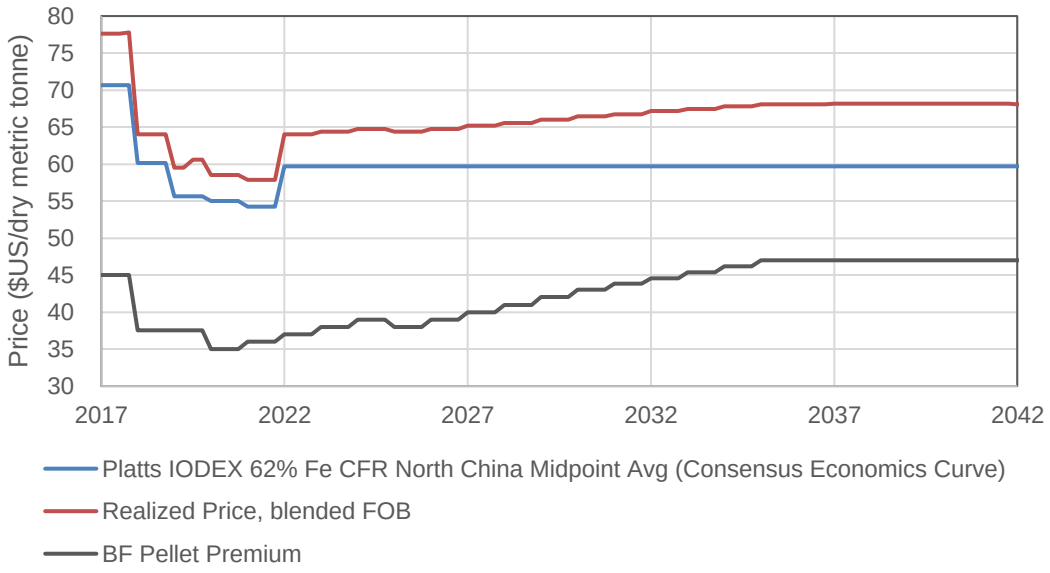


Figure 19-1: Comparison of benchmark price series and realized price

Iron ore is priced starting with the benchmark price noted above. To estimate an indicative selling price the benchmark price is scaled based on ore grade and adjusted for penalties and premiums for high or low levels of impurities, freight, value-in-use and moisture during negotiations between the seller and purchaser of the ore.

Realized prices have been estimated using conversions from benchmark pricing to realized price supplied by Baffinland.

19.3 Production Ramp-up

Table 19-2 below summarizes the annual production ramp-up for the project. The graphical representation in Figure 19-2 shows the ramp-up details on a quarterly basis, to achieve the target annual production of 12 Mtpa.

Table 19-2: Annual production ramp-up to 12 Mtpa

	2017	2018	2019	2020	2021+
Finished Ore Production, Mt	5,2	5.3	7.2	12.0	12.0
Ore Shipped, Mt	4.8	5.2	5.5	11.9	12.0

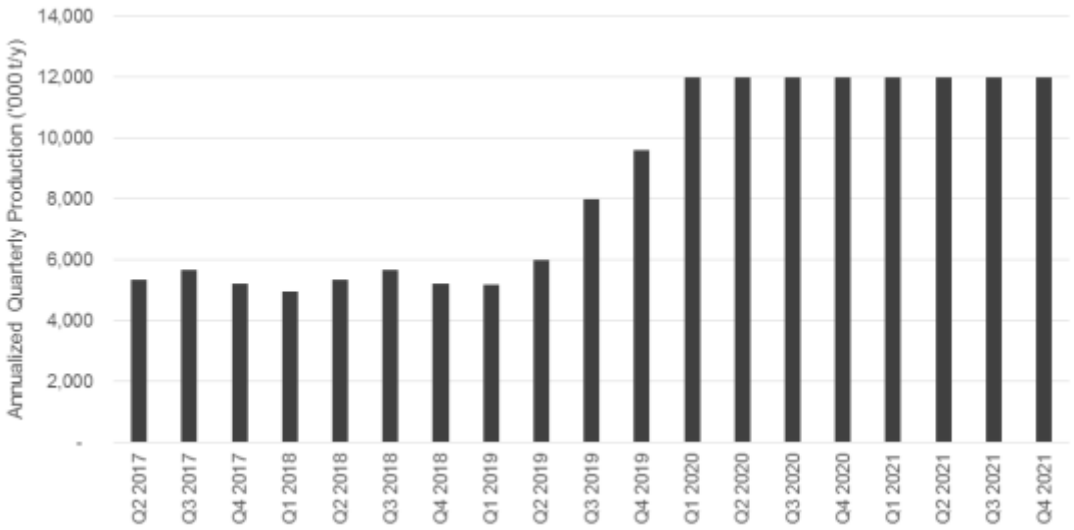


Figure 19-2: Quarterly finished ore production, annualized rates

Finished ore production is forecast to reach a rate of 60% of nameplate (7.2 Mtpa) on a sustained basis from Q3 2019. Shiploading is expected to cross the same threshold in the 2020 shiploading season.

19.4 Operating Costs

The detailed development of the operating costs is discussed in section 14 of this report. A summary of the operating costs used in the financial analysis is presented below. Unit costs have been adjusted from those reported in section 14 to account for changes in fuel price and foreign exchange rates.

Table 19-3: Annual operating cost summary during ramp-up

	Units	2017	2018	2019	2020	2021	2022
Finished Ore Production	Mt	5.2	5.3	7.2	12.0	12.0	12.0
Unit operating costs	$US/t wet	34.69	33.70	25.25	14.84	15.93	15.60

Operating costs vary year to year, in accordance with the mine plan (stripping ratio and amount of waste to be moved) and the average haul distance varying over the life of mine. Unit operating costs are higher during production ramp up, and towards the end of the mine's life, when production is low but fixed costs such as labour are the same as during full production.

19.5 Capital Costs

19.5.1 Expansion Project Capital

The capital cost estimate, incurred cost curve used in the preparation of this financial model, and other related items are covered in section 12 of this report.

The following table summarizes the different currencies used (US Dollars, Euros and Canadian Dollars), and their relative contributions to the total capital cost.

Table 19-4: Capital Cost Foreign Exchange Mix

Currency	Conversion Rate	Total ($US millions)	% of Total Installed Cost
United States Dollar	1	144.21	15%
Canadian Dollar	0.7355	724.08	77%
European Euro	1.0867	68.55	7%

When reforecasting capital spending using a varying exchange rate and performing exchange rate sensitivity analysis, Euros and Canadian dollars were assumed to move in tandem relative the US Dollar.

19.5.2 Sustaining Capital

See section 14 of this report.

19.5.3 Working Capital

Working capital changes were estimated using assumptions included in Baffinland's financial model. These include the following:

- Expansion project accounts payable: Average 180 days outstanding
- Operations accounts payable: Average 60 days outstanding
- Fuel is purchased on consignment annually

Based on the above assumptions, and the amount and timing of project funding considered for project development, working capital is not forecast to have a negative impact on overall corporate cash flow during project development.

19.6 Results

Using the inputs as described above, the following summary provides an overview of the production, key costs and other assumptions during the ramp-up period.

Table 19-5: Project overview summary ($US millions, unless otherwise indicated)

	Units	2017	2018	2019	2020	2021
Production	*Mt*	5.2	5.3	7.2	12.0	12.0
Shipments	*Mt*	4.8	5.2	5.5	11.9	12.0
Exchange rate	*US$/C$*	0.75	0.76	0.76	0.77	0.77
Iron Ore prices						
Index - CFR China	*US$/t*	$ 71	$ 60	$ 56	$ 55	$ 54
Realized price	*US$/t*	78	64	60	59	58
Revenues		$ 410	$ 331	$ 447	$ 759	$ 758
Costs						
Operating		183	182	186	182	195
Freight and port charges		27	31	35	68	69
Royalties and overheads		27	28	18	17	17
EBITDA		$ 174	$ 89	$ 208	$ 492	$ 478
Capital Spending		$ 335	$ 452	$ 254	$ 42	$ 12
Unit operating cost	*US$/t*	$ 35	$ 34	$ 25	$ 15	$ 16

19.6.1 Net Present Value (NPV)

Average, undiscounted average unit cash flows for the life of mine are shown below:

Table 19-6: Cash flow summary over life of mine

Cash flow summary, $US/t	Average, LoM
Revenue	$71.62
Operating costs	(18.06)
Freight and port charges	(6.14)
Royalties and overheads	(1.82)
EBITDA	45.60
Capital spending	(5.12)
EBITDA less Capital Spending	40.48

The resulting project NPV is summarized in the tables below. NPVs include impact of pre-existing financing included in Baffinland's financial model.

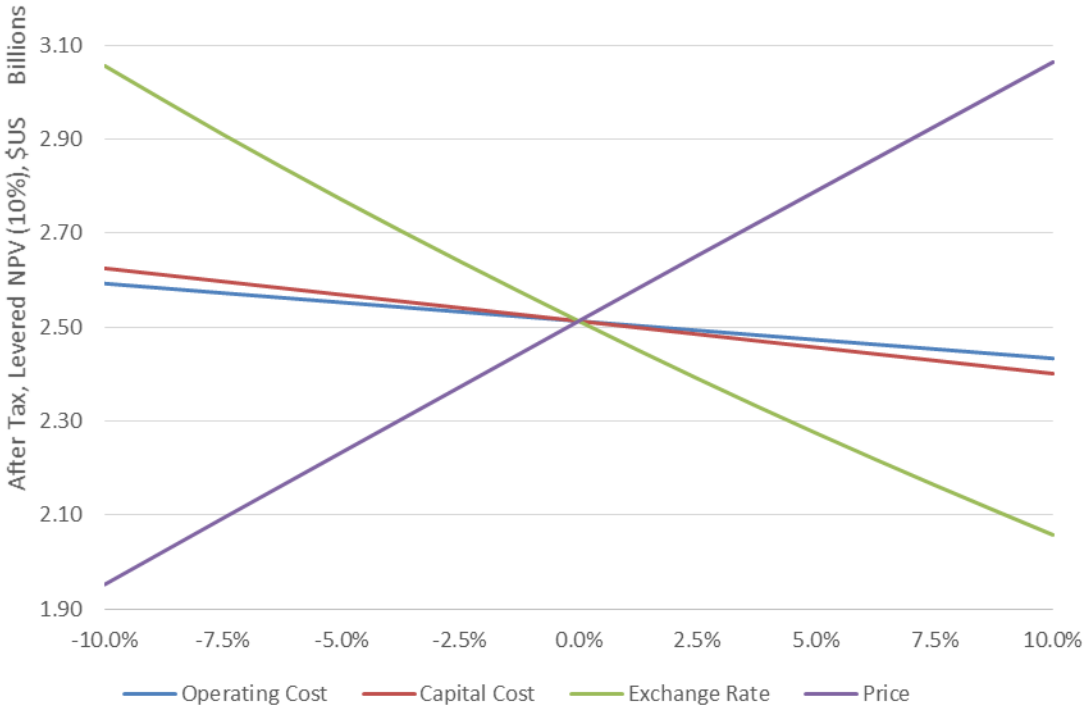
Table 19-7: NPV summary, $US millions (excluding sunk costs)

Discount rate	Pre-tax unlevered	After-tax levered
7%	5,717	3,437
8%	5,044	3,017
10%	3,975	2,346

19.6.2 Sensitivity Analysis

A sensitivity analysis was performed to examine the impact to after tax, levered NPV from changes in forecast benchmark price, exchange rate, capital costs and operating costs.

Figure 19-3: Net Present Value Sensitivity at 10% of After Tax, Levered Cash Flow



Benchmark prices which directly impact revenue are the largest sensitivity. Capital costs and operating costs are largely denominated in Canadian Dollars, while revenues are in US Dollars. Exchange rate showing the second largest sensitivity is therefore expected.

19.2 Reference Documents

Document Number	Title	Revision	Date	Appendix Number
	Financial Model			A19-1