image resources

30 May 2017

STRONG BANKABLE FEASIBILITY STUDY RESULTS BOONANARRING / ATLAS PROJECT

HIGHLIGHTS:

- **Low project capital cost estimate of A$52M inclusive of ~$8M for resalable land;**
- **Project Pre-Tax NPV of A$135M at 8% discount rate;**
- **Project Pre-Tax IRR of 64%;**
- **Payback period of 22 months;**
- **Off-Take Agreement for 100% of products/revenue in place;**
- **Relocatable capital equipment to produce HMC already acquired;**
- **First production targeted for March 2018;**
- **Upside Opportunities at and near Boonanarring including:**
  - Confirmed potential to extend mine life with high grade mineralisation;
  - Potential to process lower grade overlying layer of mineralisation;
  - Several other deposits with high grade Mineral Resources in the vicinity.

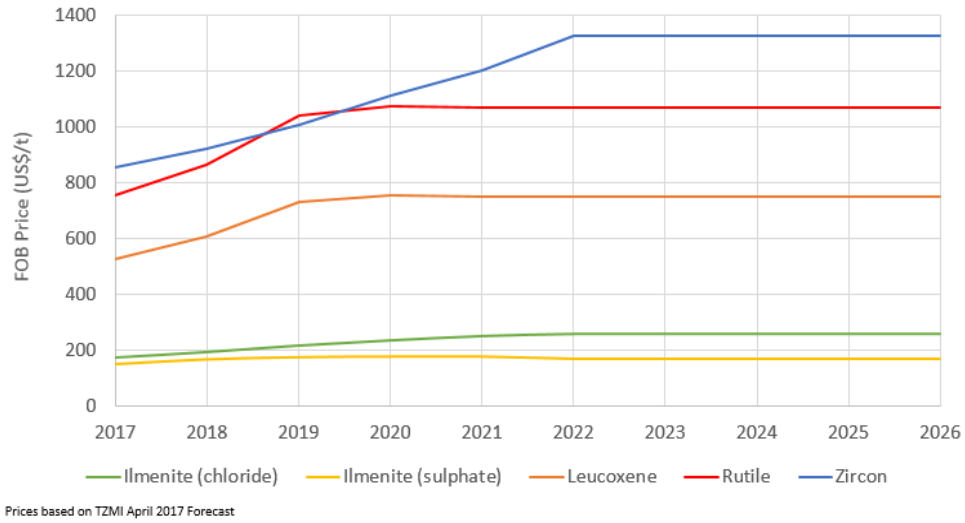
Image Resources NL (ASX: IMA) ("Image" or "the Company") is pleased to announce the **results of a Bankable Feasibility Study (BFS)** on its **100%-owned Boonanarring and Atlas mineral sands deposits** (collectively the **'Project'**) located in the **infrastructure-rich North Perth Basin,** with Boonanarring approximately 80 km north of Perth, Western Australia.

The Project is considered a **very low capital cost** project when compared to other mineral sand projects (Figure 3) with a **rapid payback period estimated at just 22 months**. The BFS includes estimated project capital costs of approximately **A$52M** with approximately $8M for the purchase of land which is resalable following the completion of mining and rehabilitation.

The **pre-tax NPV** for the Project is estimated to be **A$135M, based on TZMI forecast mineral sands prices (Figure 1),** using an 8% discount rate, with a corresponding **IRR of 64%**. **Importantly, using current 'spot' commodity prices as at 30 April with no escalation in future years, results in a very healthy pre-tax NPV estimate of A$58M**. This estimate will increase as commodity prices rise; for example, as recently announced by Iluka Resources indicating a zircon price increase of US$130/tonne (up to US$1,100/tonne), scheduled to take effect 1 July 2017.

Image Resources NL ABN 57 063 977 579
Ground Floor, 23 Ventnor Ave West Perth WA 6005 | PO Box 469 West Perth WA 6872
T: 08 9485 2410 | F: 08 9486 8312
www.imageres.com.au

Figure 1: Mineral Sands Price Forecast



Capital Equipment

The principal reason capital costs for the Project are so low is that **the Company has already acquired (June 2016) the key capital equipment required to receive run-of-the-mine ore at the mine and to transport the ore slurry to and through a wet concentration plant (WCP) for the recovery of heavy minerals and production of heavy mineral concentrate (HMC) product**. This equipment is currently being stored in South Australia and will be relocated and reassembled at the Boonanarring mine site following completion of Project financing.

100% Offtake

Importantly, the Company has secured an **offtake agreement for 100% of the HMC to be produced for the life of the Project** with established HMC processing company Shantou Natfort Zirconium and Titanium Co., Ltd (**Natfort**) in China. Pricing will be **based on then-current relevant market prices for contained zircon, rutile, leucoxene and ilmenite and with full value for the contained TiO_2 products on a shipment by shipment basis**. The HMC pricing model has been reviewed and endorsed by TZMI as market-based and utilising standard industry protocols for pricing HMC. This off-take is an arm's length, market-based arrangement which contractually **secures 100% of the revenue for the Project**.

The HMC offtake agreement with Natfort is subject to shareholder approval. The zircon offtake agreement previously approved by shareholders with Guangdong Orient Zirconic Ind Sci & Tech Co., Ltd (OZC) will be placed in indefinite suspension, and the zircon produced by Natfort from the processing of the Image HMC will be sold by Natfort to OZC in return for OZC agreeing to suspend the zircon offtake agreement. Changing from a zircon offtake to HMC offtake agreement has several positive outcomes for Image as follows:

- it results in securing 100% of revenue instead of 65-70% for zircon only;

- it provides faster access to revenue as letters of credit can be converted to cash as soon as each shipment of HMC departs the Bunbury port, as compared to having to wait until the HMC is processed into final products and the zircon is loaded and departs the port of loading;

- it minimises total working capital requirements by A$7-8M due to the faster receipt of revenue; and

- it eliminates Image's risks and potential extra costs associated with HMC processing (separation) including processing and delivery schedules, product quality issues, administration and marketing.

Project Upside Potential

The Project BFS is based on current Ore Reserves at Boonanarring and Atlas with a combined mine life of over 8 years. **Importantly, there are a number of opportunities to extend the Project mine life** including potential future production from **a confirmed 5.6km extension area of high grade mineralisation to the north of Boonanarring that is within economic pumping distance of the planned location of the WCP** (ASX announcement 13 March 2017 – Outstanding Drill Results Confirm 5.6km High Grade Extension of Boonanarring Deposit). Similarly, there is potential for extension of the Boonanarring deposit to the south and potential for extension of the current deposit at Atlas to the south, as well as potential additional Ore Reserves stemming from a reassessment of existing Mineral Resources if and as general market conditions and commodity prices improve.

In addition, consultant Optiro Pty Ltd identified a significant layer of lower grade mineralisation overlying high grade mineralised ore at Boonanarring in the update of the Mineral Resources estimate in accordance with the JORC Code (2012), (ASX announcement 13 January 2017 – Tonnage Doubles in Mineral Resources Update for Boonanarring Project). Only a small proportion of this mineralisation was included in the mine plan for the BFS. Consequently, there is an opportunity to process the balance of this material as commodity prices further improve.

Finally, Image has several other high-grade mineral sands projects with mineral resources in the vicinity of Boonanarring, that could potentially be accessed for mining in the coming years, by dry mining method and WCP processing as planned for Boonanarring and Atlas. These projects include Red Gully, Gingin South and Regans Ford which is still under application. Image also has two high-grade projects in the vicinity of Atlas that could potentially be accessed in the coming years, being Hyperion and Helene, with Hyperion potentially within pumping distance of the Atlas deposit.

Go-Forward Plan/Process

The Project has been on a fast-track development basis since June 2016, with project commissioning scheduled to occur in Q1 2018 and **first production anticipated as early as March 2018**. Now that the BFS has been completed, Image plans to continue to fast-track the development of the Project by proceeding directly to seeking to secure Project financing through a combination of debt and equity. However other project financing methods will also be considered. The Company has engaged the services of PCF Capital Group to assist with the debt portion of the financing.

In addition, Image's project team and consultants will continue to review capital and operating costs to determine if any aspects of the plan can be further optimised to reduce overall costs.

BFS RESULTS

Financial Overview

The BFS is based on independent third party engineering, costings and pricing assumptions and financial modelling. BFS results demonstrates the Project is a relatively low capital cost project at only A$52M which includes approximately 15% for the purchase of land associated with the Boonanarring deposit. Pre-tax NPV is robust at A$135M based on an 8% discount rate, and a post-tax NPV of A$100M. Pre-tax and post-tax Internal Rate of Return (IRR) are 64% and 54% respectively.

The Project will provide significant returns and rapid payback on capital, estimated at only 22 months. Key financial metrics are summarised in Table 1.

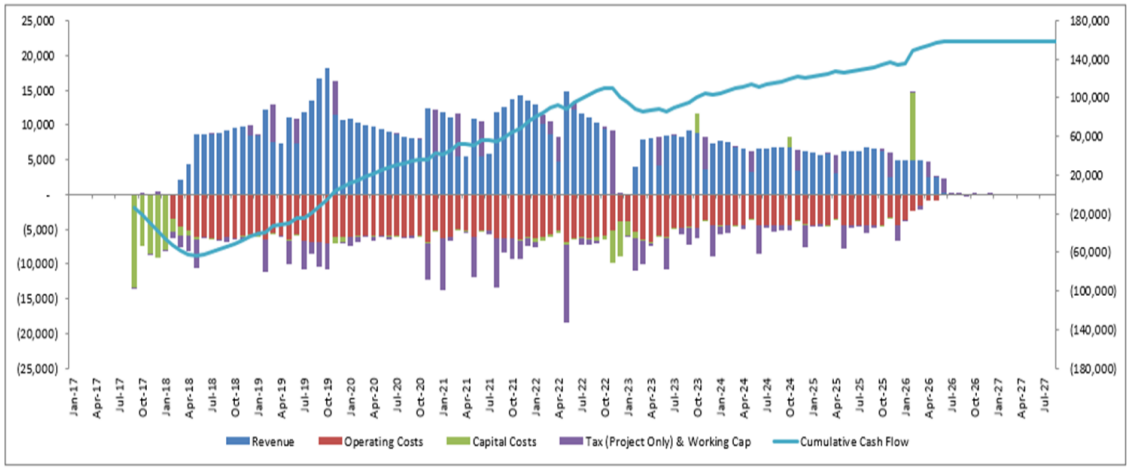
Assuming the HMC offtake agreement will operate as contracted, Project cashflows are strong and will 100% underpin the life of the Project. Month by month revenue, operating costs, capital expenditure, tax and cash flow financial model projections are presented in Figure 2. Project Net Revenues, Royalties, Operating Costs and EBITDA are presented in Table 2.

Table 1: Project Financial Metrics

Valuation Date	**1-Jul-17**
Discount Rate	**8%**
Pre-Tax Project NPV (A$M)	**135**
Post-Tax Project NPV (A$M)	**100**
Pre-Tax IRR	**64%**
Post-Tax IRR	**54%**
Payback Period - From Construction Start (years)	**2.2**
Payback Period - From First Production (years)	**1.8**
Project Capital (A$M)	**52**

Note: figures presented in this Table are rounded.

Figure 2: Project Monthly Revenue, Costs and Cashflow



Source: Image/PCF Capital

Table 2: Project Net Revenues, Operating Costs and EBITDA

A$M, Real 2017 Prices	Boonanarring	Atlas	Project
Revenue	**553**	**240**	**793**
Royalties	**(26)**	**(11)**	**(37)**
Net Revenue	**527**	**229**	**756**
Operating Costs	**(336)**	**(154)**	**(490)**
EBITDA	**191**	**75**	**266**

Sensitivity Analysis

The Project is relatively sensitive to movements in commodity prices, particularly zircon, as 60-70% of revenue is expected to be generated from contained zircon. Another key sensitivity is the A$:US$ exchange rate, given HMC will be priced in US$, whereas most of the capital and operating costs will be denominated in A$. Other areas of sensitivity are ore grade, HM recovery to product and operating costs.

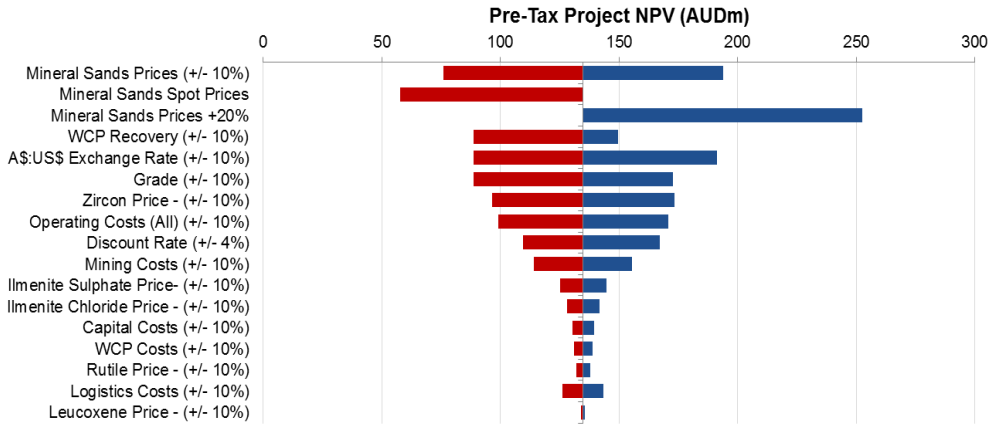
Importantly, using 'spot' commodity prices and $A:$US exchange rate (as at 30 April 2017) with no escalations, results in a very positive project NPV of A$58M at an 8% discount rate. Moreover, mineral sands commodity prices have recently started trending upwards and are continuing to rise, as demonstrated by a recent announcement by Iluka Resources indicating a zircon price increase of US$130/tonne (up to US$1,100/tonne), scheduled to take effect 1 July 2017.

As a demonstration of the sensitivity of commodity prices, if the average price of all four mineral sand commodities increase 20% from TZMI commodity projections used in the financial model, the project NPV increases sharply to more than A$250M. Figure 3 displays various Project sensitivities.

Project Mine Life

Project economics are based on known current Ore Reserves for an initial 5 year mine life at Boonanarring followed by a move to Atlas to add a further 3 years to overall life of mine, as detailed in the financial model.

Figure 3: Project Sensitivity Analysis



Capital Costs

Total development capital for Boonanarring is estimated at A$52M. Approximately A$8M of this total is attributable to land purchases which will be available for resale once mine rehabilitation has been completed on each parcel.

The Boonanarring capital cost estimate for the Project has been prepared in accordance with capital cost estimating guidelines and BFS study standards. The inputs to this Study generally meet or exceed the requirements for BFS capital estimating. The total capital cost estimate complies with the required accuracy range of ±15%. Atlas is at PFS level of study. Peak cash draw for the development of Boonanarring is estimated at A$64M.

Figure 4 shows the relative capital cost for development of the Boonanarring deposit as compared to other mineral sands projects and demonstrates Boonanarring is a very low capital cost project.

Figure 5 shows the relative comparison of the capital cost/revenue ratio for Boonanarring versus other mineral sands projects and once again demonstrates the very low capital cost of the project,

Figure 4: Project Capital Comparison (Source: TZMI; May 2017)

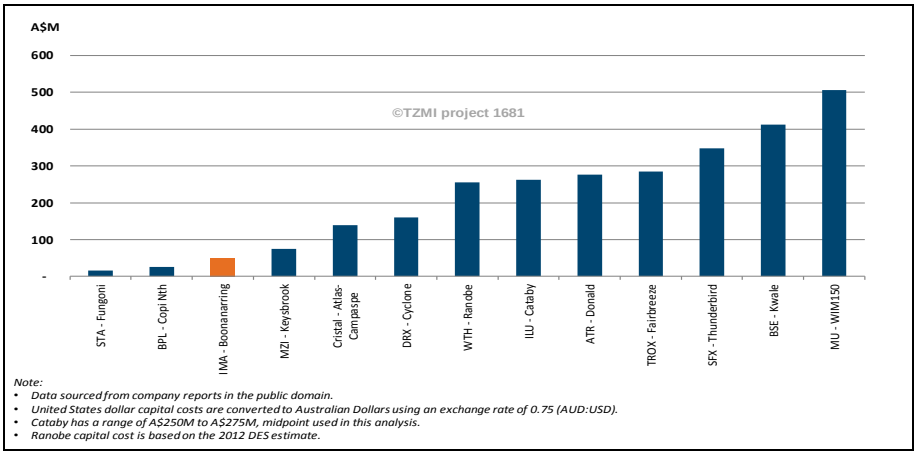
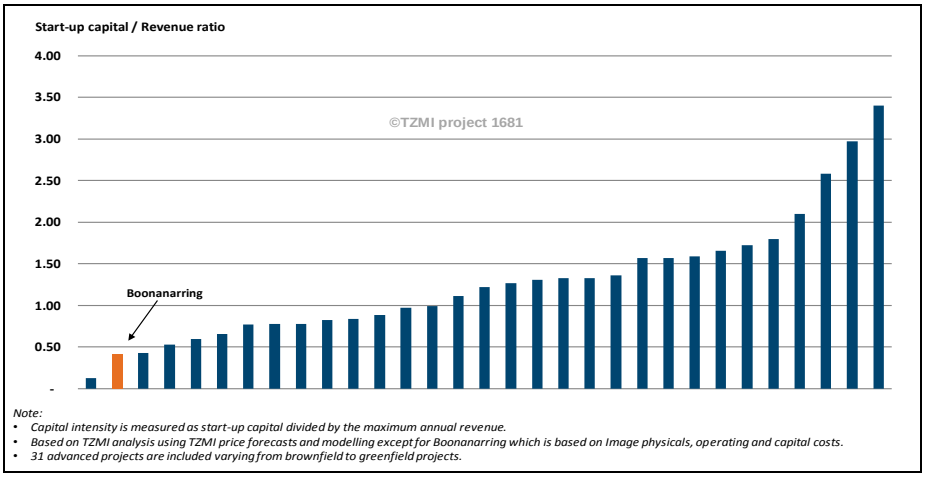


Figure 5: Start-up Capital/Revenue Comparison (Source: TZMI; May 2017)



Revenues

The Project will produce HMC containing four main products: ilmenite (both sulphate and chloride grades), leucoxene, rutile and zircon. Revenue will be based on the sale of HMC as a final product but with pricing based on then-current commodity pricing for each of the four main products. Project revenues are estimated at A$793M (Boonanarring: A$553M; Atlas: A$240M).

Zircon contained in the HMC is the key value driver representing 68% and 40% of total revenue for Boonanarring and Atlas respectively. Boonanarring zircon recovered is expected to be sold as standard grade zircon, however there is potential for some premium grade product. Atlas HMC is expected to produce a premium zircon product.

HMC Off-take Agreement

The potential cashflows, and hence financing for the Project, will be underpinned by a life-of-Project offtake agreement for all HMC produced. The offtake agreement is with **Natfort Zirconium and Titanium Co., Ltd (Natfort)**, a private HMC processing company in China, which processed HMC from Murray Zircon's Mindarie Mineral Sands Project in South Australia and sold the zircon to **Orient Zirconic Sci Ind & Tech Co., Ltd. (**OZC) for the past five years. Natfort (previously Shantou Guofu Zirconium and Titanium Co., Ltd) is located in Shantou City in the Guongdong Province in China and was established in 2012. Natfort focuses exclusively on processing mineral sands concentrates to produce zircon for sale to OZC and TiO2 products for sale to its customers in China.

Key highlights of the HMC offtake agreement are that 100% of HMC produced from the Project will be sold, with no minimum specification on HMC quality. Pricing for HMC will be based on a pricing model reviewed and endorsed by TZMI and which was confirmed to be market-based using published commodity prices (CIF China) with adjustments for the specific quality of Project products. The pricing model also includes allowances for HMC processing costs, foreign exchange rates, port handling and transport to the separation plant in China, estimated recoveries and an agreed 5% profit margin for the processor (Natfort).

HMC sales will be supported by Letters of Credit from Natfort based on the predetermined value of the HMC per the HMC pricing model. Natfort's LCs will, in commercial effect, be indirectly supported by the provision of LCs from OZC to Natfort for the purchase of a minimum of 90% of the zircon produced by Natfort from the processing of the Image HMC. The existing zircon offtake agreement between Image and OZC will be indefinitely suspended during the period of operation of the HMC offtake agreement with Natfort.

Operating Costs

Project Operating costs are estimated at A$489M (Boonanarring: A$336M; Atlas A$154M). Details are provided in Table 3.

Logistics

During operations, all HMC supply-chain activities will be undertaken by a logistics contractor. The contractor will employ a team to oversee and arrange all activities that will allow HMC to be transported, stockpiled and loaded for shipping to China. Roads and logistics facilities are well established.

Table 3: Project Operating Costs

Item	Boonanarring		Atlas	
	A$M	A$/t HMC[1]	A$M	A$/t HMC[1]
Mining	206.8	185.5	62.5	87.80
Processing	34.3	30.7	19.7	27.7
Direct cost	241.1	216.2	82.2	115.5
Land Access	0.6	0.5	0.5	0.6
Native Title Payments	-	-	1.5	2.2
Site Admin	19.8	17.8	18.9	26.6
Logistics[2]	73.9	66.3	50.9	71.6
Subtotal Operating Cost	**335.4**	**300.8**	**154.0**	**216.5**
Royalties[3]	26.0	23.4	10.9	15.4
MRF Levy[4]	0.1	0.1	0.1	0.1
Total Operating Costs[5]	**361.5**	**324.2**	**165.0**	**232.0**

Table Notes:

(1) Based on total HMC production of 1,115kt for Boonanarring and 711kt for Atlas

(2) Includes road transport, port charges and shipping

(3) Royalties are charged on the value of HMC sold at 5% (and treated as a deduction against revenues).

(4) Mineral Rehabilitation Fund Levy is charged at an average rate per hectare of disturbance

(5) Excluding capitalised pre-strip of A$7.5M included in initial development capital

Key Risks

Key risks were identified and classified as priority action risks. Each risk has been assigned within the owner's team and action plans have been developed to mitigate the risks. The key risks include:

- Securing full Project capital funding;
- An increase in working capital or preproduction expenditure resulting in top-up funding being required;
- Delays in implementation resulting in additional capital, working capital or preproduction costs;
- Negative movements in commodity prices and/or foreign exchange;
  - Pre-financing: resulting in delays or difficulties in raising the required funds for development of the Project;
  - Post-production: resulting in weaker than expected cash flows/returns from the Project;
- Failure of the HMC offtaker to meet its obligations under the HMC Offtake Agreement, and in particular to provide letters of credit on a timeous basis as required;

Post-BFS Project Schedule

The current project schedule anticipates full Project funding being secured during the third quarter of 2017, so as to facilitate the opportunity for the Board of Directors to render a decision to mine, which would be followed by a rapid construction period and a move to the processing of ore commencing as early as March 2018. Delays in the completion of Project funding or in the Board reaching a decision to mine will inevitably delay the start of construction and commencement of production.

Decision to Mine

In accordance with the Share Consideration Deed between Image and Murray Zircon (dated 8 June 2016), the Decision to Mine is the decision approved by a majority of the Board to incur the required costs in connection with the construction of a mining and processing operation required to commence commercial production, and includes the approval of a target date for the commencement commercial operations. The criteria for a decision to mine includes the following:

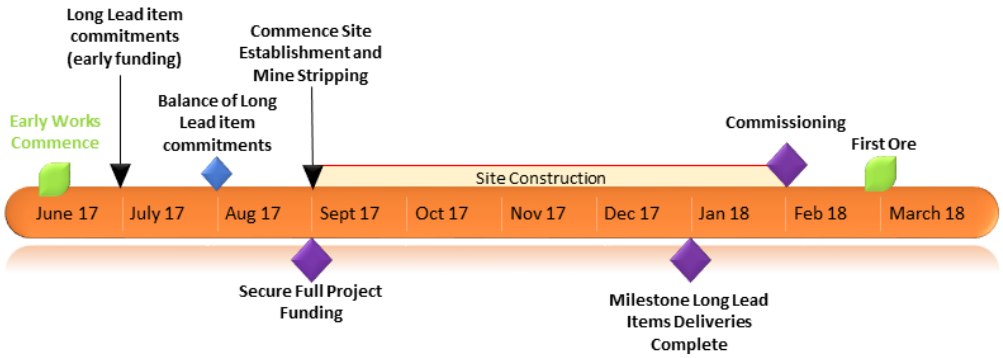
- The receipt of all necessary government agency approvals, consents, licences, permits and registrations;
- Full project funding facilities in place and available for drawdown; and
- All material contracts, necessary for the construction and commencement of mining and HMC production, negotiated and prepared for execution.

It is important to note that if the Decision to Mine occurs prior to 8 June 2018, Murray Zircon must be issued (within 5 business days of the Decision to Mine) additional shares in Image in accordance with the Share Consideration Deed. The number of shares is equal to 5% of the total number of Image shares on issue at the time of the execution of the Asset Sale and Purchase Agreement between Image, Murray Zircon and OZC (8 June 2016), being 35,198,459 shares.

Implementation Plan

The Boonanarring mine and site construction is scheduled to commence Q3 2017, followed by commissioning and first production in Q1 2018 (refer Figure 6). A three month period for ramp-up to full production has been reflected in the implementation plan.

Figure 6: Boonanarring Indicative Project Timeline



Source: Image/BatteryLimits

Opportunities

The following opportunities will be considered during the detailed design and implementation stages of the Project as summarised in Table 4.

Table 4: Project Opportunities

Opportunity	Impact	Comment
Refurbished and/or second-hand plant and equipment	Reduced Capital cost	Review and optimise equipment selection during details design stage
Processing Overlying mineralisation	Reduced strip ratio, increases HMC tonnes	Review and control blending based on grade during mining
Dry milling of HMC to Magnetic and Non-magnetic concentrates or final products	Reduced transport, improved revenue, increased process cost	Review once plant is operational

BFS Conclusions and Recommendations

Based on the financial outcomes of the BFS and subject to Board approval, it is anticipated that Image will proceed with Project financing and development, including funding considerations to meet orders for certain long-lead items including a slimes thickener, ore slurry attritioner and high voltage design and procurement. Early commitment to long-lead items will minimise delays in implementation of the Boonanarring development schedule.

See attached BFS Executive Summary by Battery Limits for additional information.

For further information, please contact:

Patrick Mutz
Managing Director
+61 8 9485 2410
info@imageres.com.au
www.imageres.com.au

COMPLIANCE STATEMENT

The Mineral Resources (as reported for Boonanarring on 13 January 2017 in ASX announcement 'Tonnage Doubles in Mineral Resources Update for Boonanarring Project' and for Atlas on 8 May 2017 in ASX announcement '68% Increase in Mineral Resource Resources for Atlas Project') have been compiled by Mrs Christine Standing, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Mrs Standing is a full-time employee of Optiro Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The Ore Reserves (as reported for Boonanarring on 10 April 2017 in ASX announcement 'Updated Ore Reserves for Boonanarring Project increases ore tonnes by 39%' and for Atlas on 30 May 2017 in

ASX announcement 'Ore Reserves update for 100% owned Atlas Project') have been compiled by Jarrod Pye, Mining Engineer and full-time employee of Image Resources, under the direction of Andrew Law of Optiro, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Law has sufficient experience in Ore Reserves estimation relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves".

Image Resources

Boonanarring and Atlas Project

Bankable Feasibility Study

Revision: 0

Date: 29/05/2017

QA/CA

Revision	Purpose	Prepared By	Reviewed By	Date	Final Sign Off
A	Issued for Internal Review	J Khosa/F Calcei	P Hearse	25/05/17	
B	Issued for Client Review	F Calcei	T Colton	29/5/17	
0	Issued for BFS	F Calcei 	P Hearse	29/5/17	P Hearse pp 

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1. Executive Summary

1.1 Project Overview

This Bankable Feasibility Study (BFS) covers the development of the high grade Boonanarring and Atlas mineral sands deposits located in the North Perth Basin in Western Australia and 100% owned by Image Resources NL (Image).

Study assumptions include dry, open cut mining and conventional wet gravity separation at a processing rate of 500 dry tonnes per hour to recovery the Heavy Minerals into Heavy Mineral Concentrate (HMC) for direct sale under an off-take agreement. Mining will begin at Boonanarring and the processing plant will be located near the mid-point of the 13km long deposit and will remain in place for the life of mine.

Mining will be conducted by a qualified mining contractor incorporating concurrent tailings disposal and rehabilitation of mined-out areas. After mining is completed at Boonanarring, the mining fleet and processing equipment will be relocated to Atlas. Total life of the current reserves for both deposits is 8+ years with significant opportunities for mine life extension, especially with regard to high grade extensions of the deposit at Boonanarring. Near Atlas are the Hyperion and Helene deposits of which Helene is within potential pumping distance of Atlas.

HMC product will be transported to Bunbury for bulk loading and shipping to the mineral separation plant owned by the off-taker.

The BFS was started in July 2016 as a process of updating Image's 2013 feasibility study to a bankable standard and to incorporate the wet concentration plant and ancillary equipment purchased in June 2016, as well as updating all costs, assumptions and commodity prices. Based on the financial outcomes of this study it is recommended that Image proceeds with financing and development.

The basis for this recommendation is summarised as follows:

- Pre-Tax NPV[1] of A$135M at an 8% discount rate
- IRR[1] of 64% and pre-tax EBITDA[1] of A$266M
- Rapid payback of capital post production estimated at less than 2 years
- Initial development capital, including contingency and resalable land of only A$52M (refer to Table 1.1).

1. NPV = Net Present Value: IRR = Internal Rate of Return; EBITDA = Earnings Before Income Tax, Depreciation and Amortisation.

Other major factors considered in supporting this recommendation:

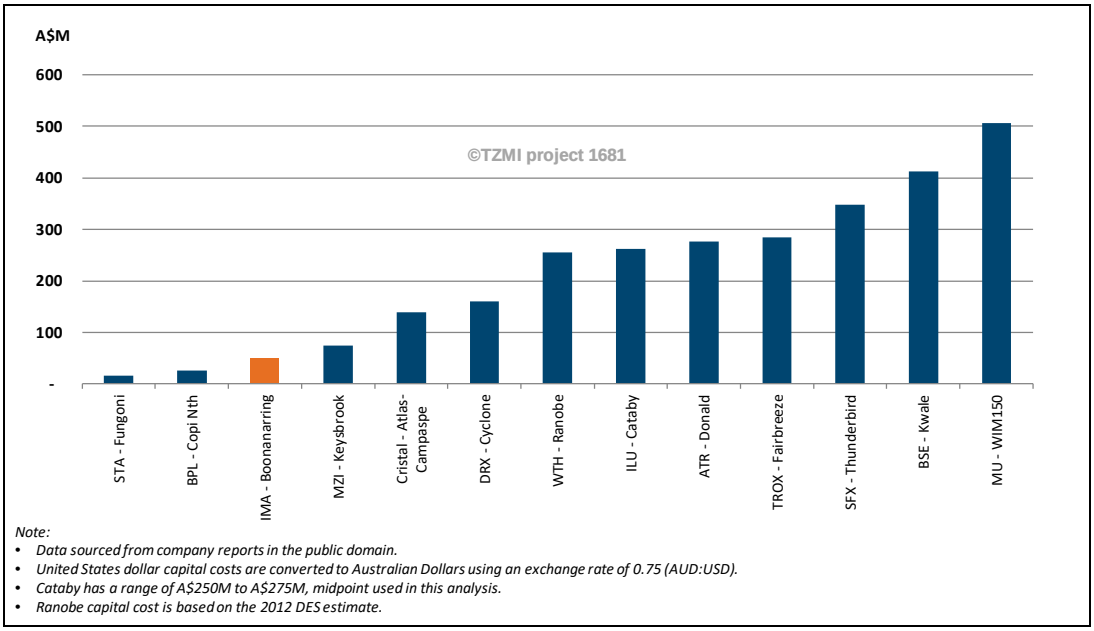
- Conventional nature of the development
- Relatively low risk of significant capital overruns or delays as the majority of the capital equipment is already owned

- Significant opportunities for extension to base case mine life
- Heavy mineral concentrate offtake agreement for 100% of production
- Improving outlook for higher heavy mineral commodity prices
- Boonanarring contains high HM and zircon grades, compared to other potential mineral sands projects (refer to Figure 1.1 and Figure 1.2).

Table 1.1 Project Key Indices

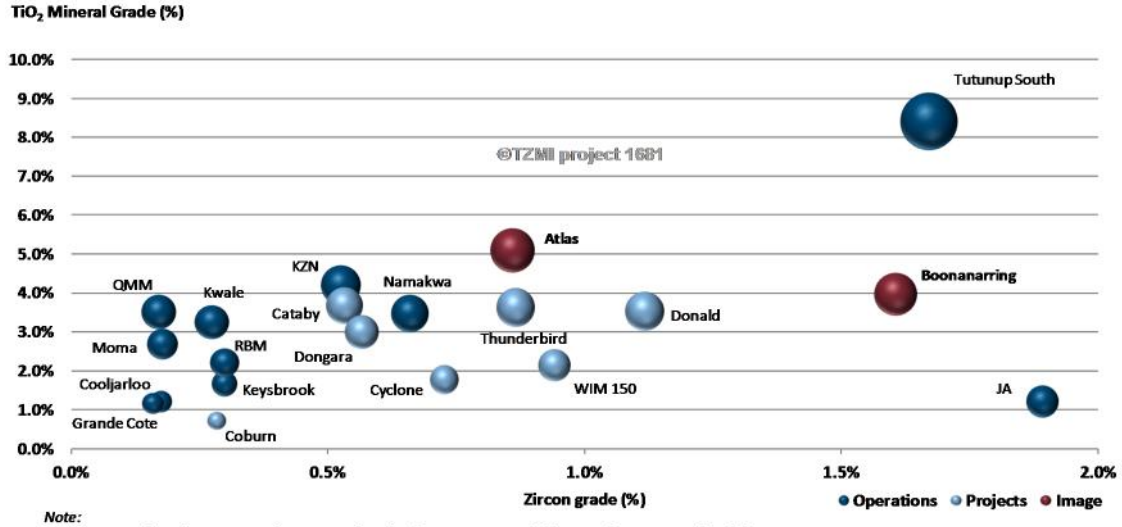
Project Key Indices		
Valuation Date	Date	1-Jul-17
Discount Rate	%	8
Pre-Tax Project NPV	A$M	135
EBITDA	A$M	266
Pre-Tax IRR	%	64
Payback Period - From First Production	Months	22
Initial Development Capital	A$M	52
Average Operating Cost - Life of Project	A$/t HMC	273
Total HMC Production - Life of Project	Mt	1.83

Figure 1.1 Benchmark of Capital Cost for Various Mineral Sands Projects



Note:
- *Data sourced from company reports in the public domain.*
- *United States dollar capital costs are converted to Australian Dollars using an exchange rate of 0.75 (AUD:USD).*
- *Cataby has a range of A$250M to A$275M, midpoint used in this analysis.*
- *Ranobe capital cost is based on the 2012 DES estimate.*

Figure 1.2 Benchmark of Boonanarring and Atlas Ore Grades Among Peers



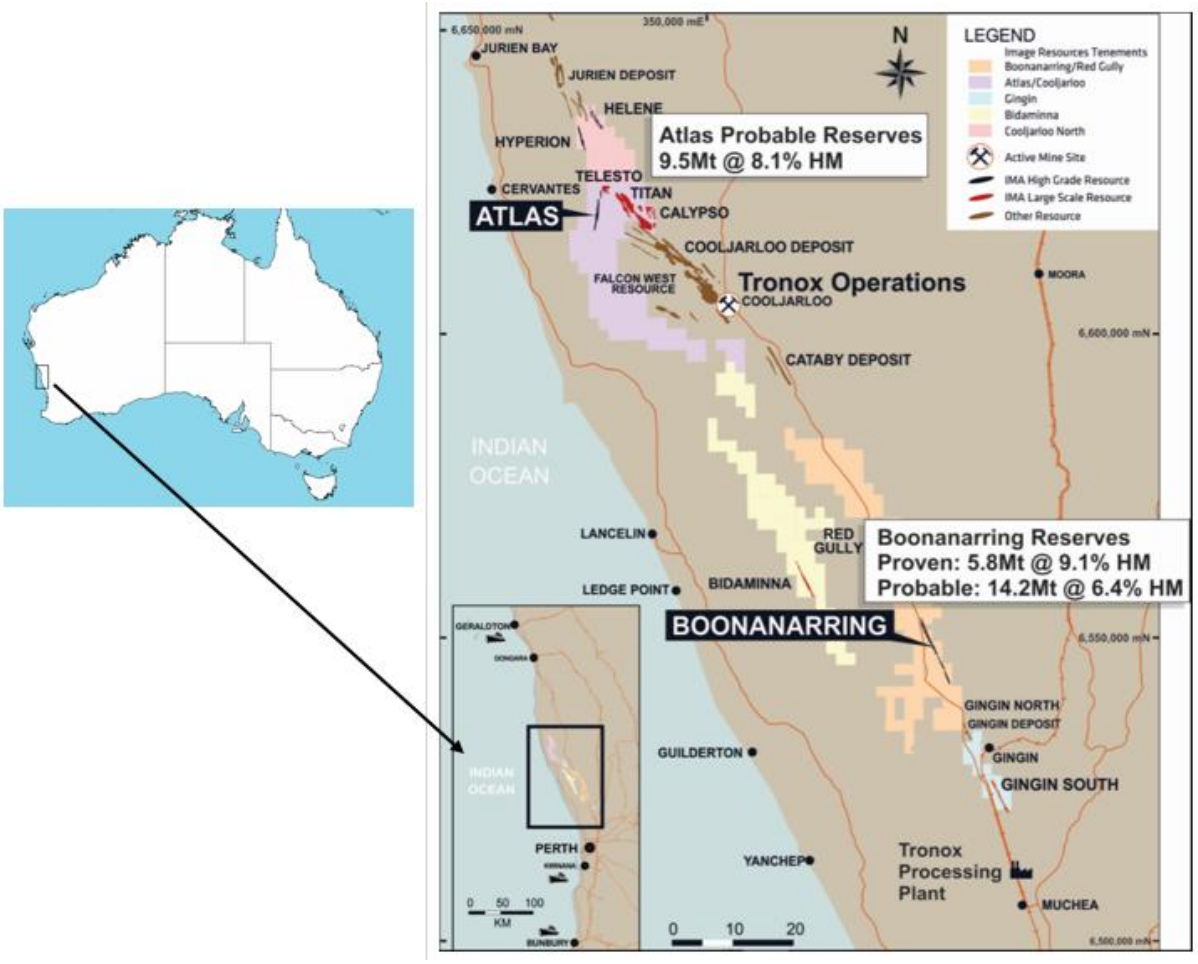
Note:

- *TiO_2 mineral grade represents the in-ground grade of titanium minerals (ilmenite, leucoxene and rutile)*
- *Zircon grade represents the in-ground grade of zircon*
- *Size of bubble represents the VHM grade (ilmenite, leucoxene, rutile and zircon).*
- *Data includes Proved and Probable Ore Reserves.*
- *Hard rock deposits are excluded from the analysis*

1.1.1 Introduction

This report discusses the technical feasibility and economics of developing mining and processing operations to extract heavy mineral bearing sands and recover the contained Heavy Minerals (HM) from the Boonanarring and Atlas deposits, collectively referred to as 'the Project'. Both deposits are 100% owned by Image Resources NL (Image) (refer to Figure 1.3).

Figure 1.3 Boonanarring and Atlas Location Plan



This study was compiled in accordance with the standards of a Bankable Feasibility Study (BFS) and particularly focusses on the Boonanarring deposit, located 80 km north of Perth in Western Australia, and includes, at a Preliminary Feasibility Study (PFS) level, Image's Atlas project located 80 km north of Boonanarring.

The BFS is based on mining the Boonanarring deposit first, using conventional, dry, open pit mining techniques to extract the ore, and using standard gravity separation in a Wet Concentration Plant (WCP) to recover the contained Heavy Minerals (HM) into a Heavy Minerals Concentrate (HMC) for sale. The HMC will be transported by road to a storage facility at Bunbury where it will be loaded onto ships and transported in bulk to China.

This study is based on current ore reserves at Boonanarring (total of 20 Mt @ 7.2% HM) as determined in accordance with the JORC Code (2012). Based on known ore reserves, mining and

processing at Boonanarring will continue for approximately 5 years. Once mining at Boonanarring is completed, the WCP will be relocated to the Atlas deposit. Mining at Atlas will also be by dry, open cut mining techniques. Based on current ore reserves at Atlas (total of 9.5 Mt @ 8.1% HM), mining and processing will continue for a further 3 years.

The BFS is based on utilisation of the WCP (Figure 1.4) and associated ancillary equipment acquired by Image from Murray Zircon Pty Ltd in June 2016, and which was previously utilised successfully at the Mindarie Mineral Sands Project in South Australia. The WCP and associated equipment is being stored in South Australia and will be relocated to Boonanarring following project capital funding.

The plant and equipment will undergo necessary minor modifications required to meet WA environmental and other regulatory requirements, as well as appropriate engineering standards and other modifications required to maximise heavy mineral recovery based on the Boonanarring ore metallurgical characteristics.

Figure 1.4 The Image Wet Processing Plant located in South Australia

As mining of the Atlas deposit is more than 5 years in the future from the publication of this study, Atlas has been compiled at a preliminary feasibility study (PFS) level with an upgrade to a BFS planned to be completed approximately two (2) years prior to the completion of mining at Boonanarring. Outputs from the Atlas PFS have been used in the Project BFS financial model.

The Atlas PFS includes the relocation of the WCP including associated equipment, infrastructure and mining operations from Boonanarring when mining at Boonanarring has been completed. The overall project concept for Atlas follows the same mining, processing and logistics pathway as Boonanarring.

1.1.2 Tenement Holding

Image Resources' North Perth Basin (NPB) project area consists of a total of 29 granted tenements and 6 tenement applications covering a total 1,000 km2 between 80 km and 180 km north of Perth in Western Australia (refer to Figure 1.3). Within these tenements, Image has secured a number of heavy mineral sands strandline deposits with including Boonanarring, Atlas, Red Gully, Regans Ford, Gingin North, Gingin South, Hyperion, Helene and Bidaminna. The mineralisation in the project area stretches along the Gingin Scarp from south of Gingin to 15 km inland from the township of Cervantes. The heavy mineral deposits delineated within the Image's NPB projects are held under a combination of Exploration Licences, Prospecting Licences and Mining Leases.

The majority of the Boonanarring Mineral Resources and Ore Reserves are secured through two Mining Leases (ML or M) granted under the Mining Act 1978. Mining Lease M70/1311, which covers the northern 7.7 km of the Boonanarring project, was granted to Image Resources on 12 March 2013. Mining Lease M70/1194, purchased from Iluka in March 2011, covers a further 2.4 km of the project area immediately south of M70/1311 (refer to Table 1.2). Exploration Licence (EL or E) E70/3041 extends over the southern-most portion of the project area. The land over the initial mining footprint has been purchased by Image and adjacent sections of land are well advanced to being secured through either land purchase options or leasing arrangements, with all compensation amounts, key terms and conditions preliminarily agreed. Purchase options and lease agreements are in draft form.

Table 1.2 Boonanarring Project Mining Act Tenure

Tenement ID	Tenement Type	Grant Date	Expiry
M70/1194	Mining Lease	16-Dec-05	15-Dec-26
M70/1311	Mining Lease	12-Mar-13	11-Mar-34
G70/250	General purpose lease	08-May-13	7-May-34
E70/3041	Exploration Licence	10-Jun-08	09-Jun-18

Two exploration licences held by Image (E70/2636 and E70/2898) cover the extent of the Mineral Resources and Ore Reserves defined to-date at Atlas. A third exploration licence (E70/3997) covers potential southern extensions of the deposit. An application for Mining Lease (MLA70/1305) over the proposed Atlas mine area north of Wongonderrah Road and adjacent areas was lodged in January 2012. Grant of the Mining Lease is expected to follow finalisation of a Native Title Agreement (NTA) with the Yued Native Title Claimants Group. All key terms and conditions of the NTA including compensation have been preliminarily agreed and only final negotiations regarding the potential effect of registration of a government Indigenous Land Use Agreement, which could extinguish Native Title over the Atlas project area, remaining to be completed.

1.1.3 Production

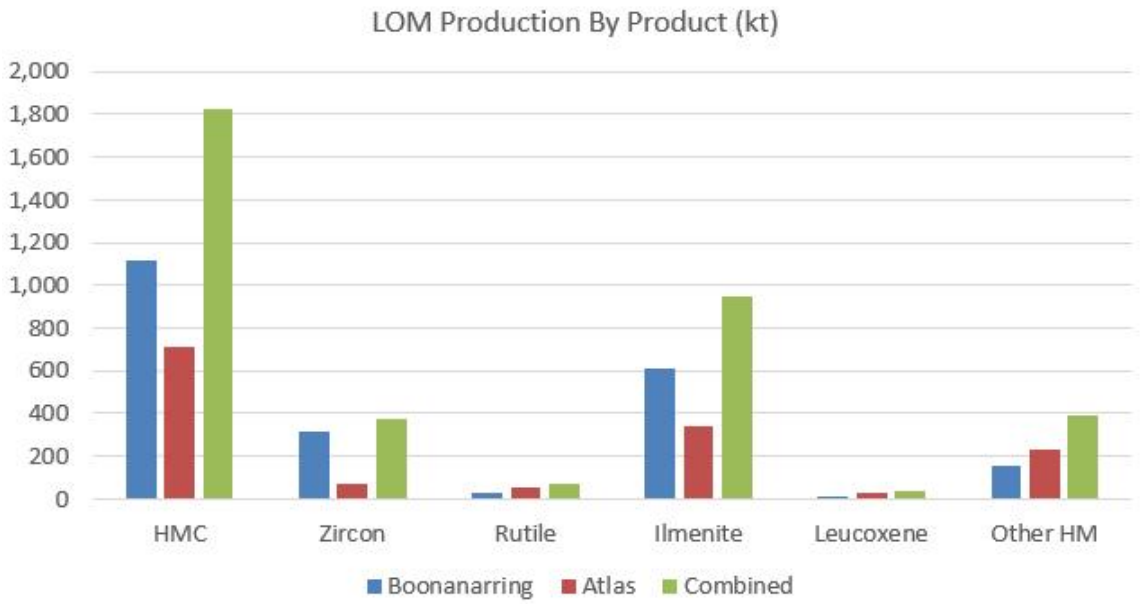
The Boonanarring mining schedule has been designed based on average mining rates of up to 3.7 Mtpa ore to a single Slurry Mining Unit (SMU) and 3.0 Mtpa of Rougher Head Feed (RHF) at the

WCP. Mining and related, ancillary activities will be conducted by a mining contractor with relevant experience in mineral sands mining. The mining schedule has been developed to extract the higher-grade sections of the deposits first, providing optimum early cashflow and rapid payback of capital investment.

Ore processing is scheduled to commence in March 2018. Production output is estimated to average approximately 220 ktpa of HMC for a total of 1,115 kt life of mine (LOM). Over the life of the current ore reserves at Boonanarring, the HMC is expected to contain approximately 610 kt of ilmenite, 310 kt of zircon, 25 kt of rutile and 14 kt of leucoxene.

Mining and processing of Atlas is currently scheduled to commence in 2023. The study envisages production at an average of approximately 210 ktpa of HMC for a total of 711 kt LOM. Over the life of the current ore reserves at Atlas, the HMC is expected to contain approximately 340 kt of ilmenite, 67 kt of zircon, 50 kt of rutile and 27 kt of leucoxene. The LOM production by product from Boonanarring and Atlas is shown in Figure 1.5.

Figure 1.5 Boonanarring and Atlas LOM Production



1.1.4 Capital and Operating Cost Estimates

Development capital, including contingency and land, of A$51.7M (refer to Table 1.3). Relative to other mineral sands mining projects, Boonanarring's capital costs are considered very low. As a result, the capital payback period is estimated to be 22 months, with the mine life at Boonanarring estimated to be five years.

Development capital to relocate operations from Boonanarring and mine the Atlas deposit is estimated at A$19.6M, excluding working capital, corporate and exploration with these costs expected to be financed from Boonanarring cashflows. This approach to mining the Atlas deposit presents a relatively low capital cost and low technical risk option with a capital payback period

estimated to be 16 months. The capital costs associated with Boonanarring and Atlas is shown in Table 1.3.

Table 1.3 Capital Estimate for the Project

Capital Costs	Boonanarring A$M	Atlas A$M	Project A$M
Total Plant	31.1	19.6	50.7
Capitalised Operating Costs & Other Development Capital	20.6	-	20.6
Total Development Capital	**51.7**	**19.6**	**71.3**
Sustaining & other Capital	5.0	1.5	6.5
Total Project Capital	**56.7**	**21.1**	**77.8**

The average annual operating cost expenditure for Boonanarring and Atlas is estimated at A$301/t HMC and A$217/t HMC respectively.

Figure 1.6 and Figure 1.7 shows the average operating cost breakdown for Boonanarring and Atlas respectively.

Figure 1.6 Total Operating Cost Breakdown for Boonanarring (A$/t HMC)

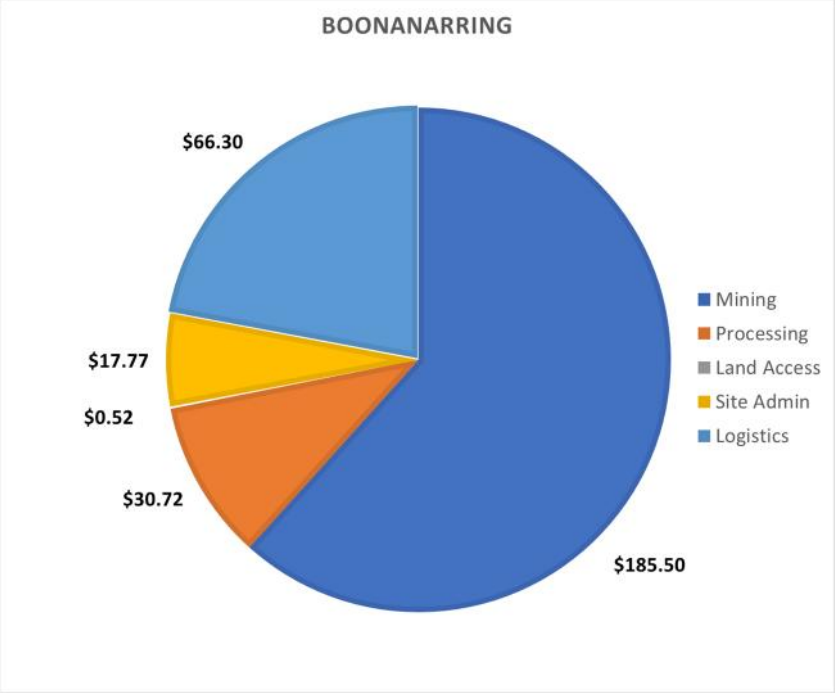
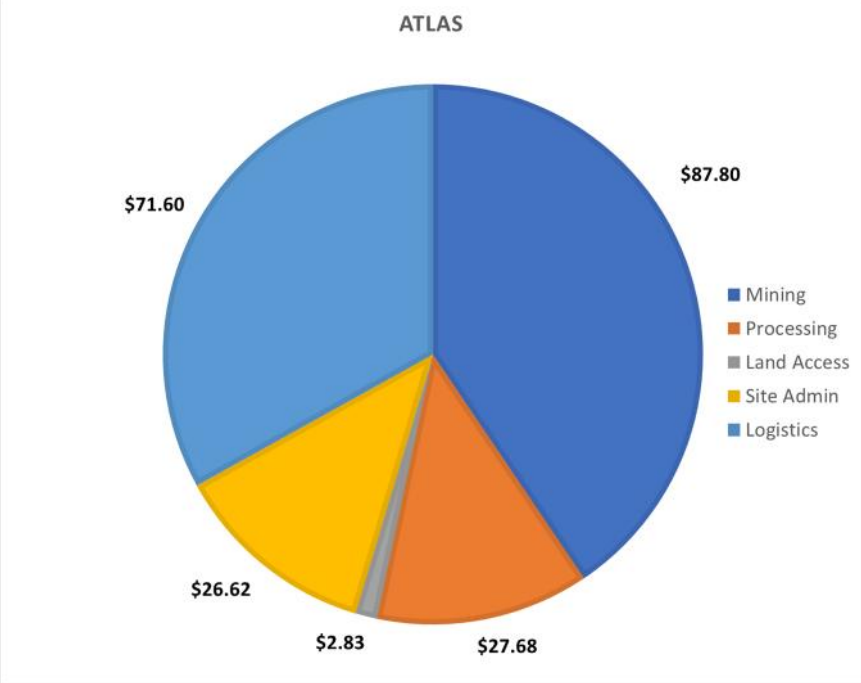


Figure 1.7 Total Operating Cost Breakdown for Atlas (A$/t HMC)



1.1.5 Financial Analysis

Financial analysis, of the Boonanarring and Atlas deposits, shows an EBITDA of A$266M over life-of-project, a pre-tax Net Present Value @ an 8% discount rate of A$135M and an Internal Rate of Return of 64% with payback of 22 months.

The BFS has demonstrated a relatively low capital cost with an initial development capital including contingency and resalable land of A$51.7M. Including working capital increases the initial project funding requirement to $64M. This results in a significant return on investment and rapid payback on capital based on independent third party pricing assumptions (Refer to Figure 1.8 and Figure 1.9).

The revenue by valuable HM in the HMC for Boonanarring and Atlas is shown in Figure 1.10. Zircon is the key driver representing 68% and 40% of total revenue for Boonanarring and Atlas respectively.

Project economics are based on an initial 5+ year mine life at Boonanarring, followed by a move to Atlas adding an additional 3+ years to overall mine life in the detailed financial model. It is noted that potential exists to expand mine life or increase production through one or more of the following:

- Extension to the Boonanarring resources and reserves to the north and south of the planned mine
- Processing of lower grade overlying layer material not included in the current mine plan
- Extensions to the Atlas resources and reserves
- Potential to mine other high grade Image deposits with current Mineral Resources.

Given the current relatively short project life, extensions at Boonanarring or Atlas, or the development of other resources is likely to have a significant positive impact on overall project economics.

Figure 1.8 Mineral Sands Price Forecast

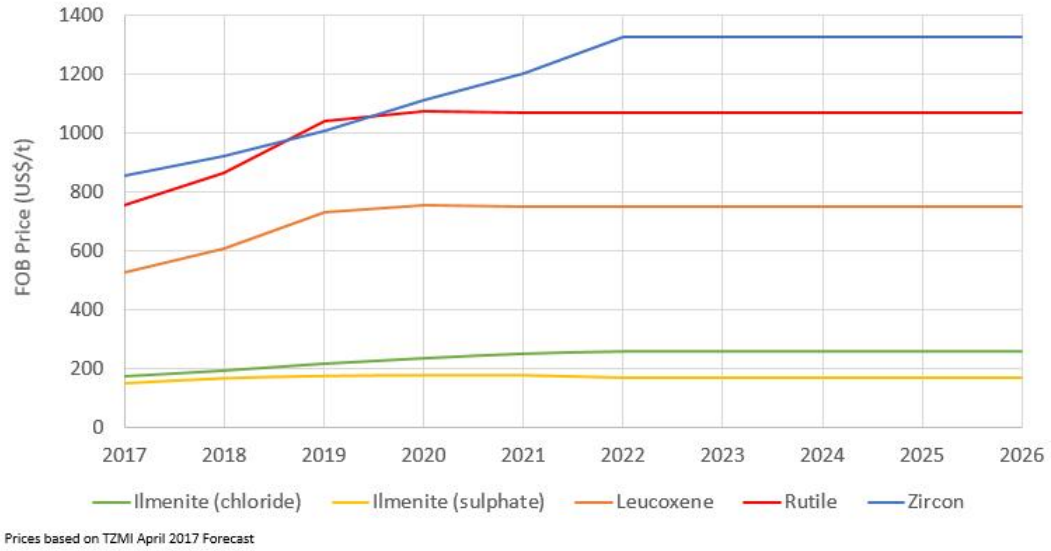
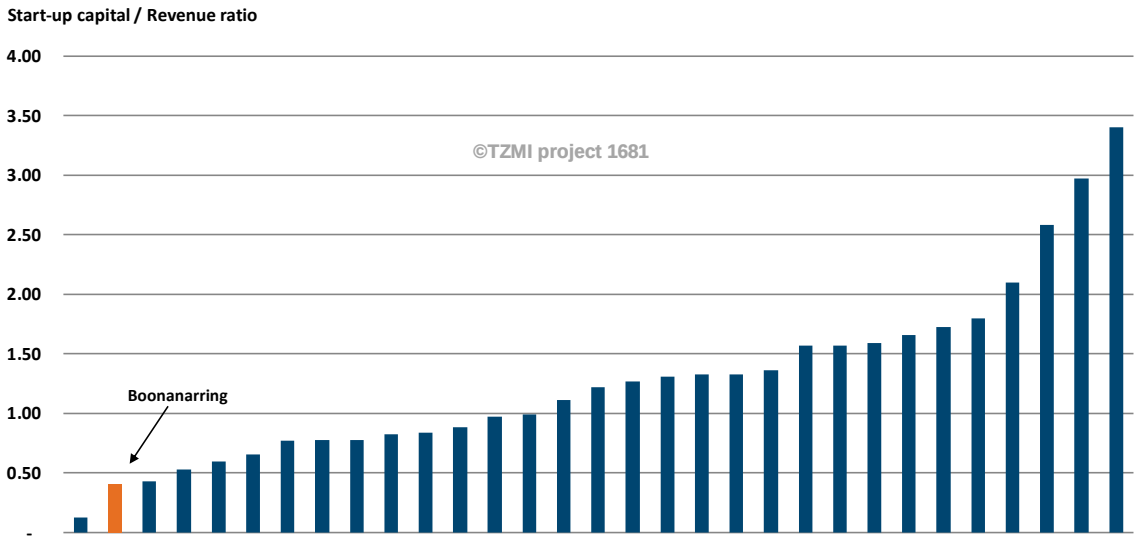


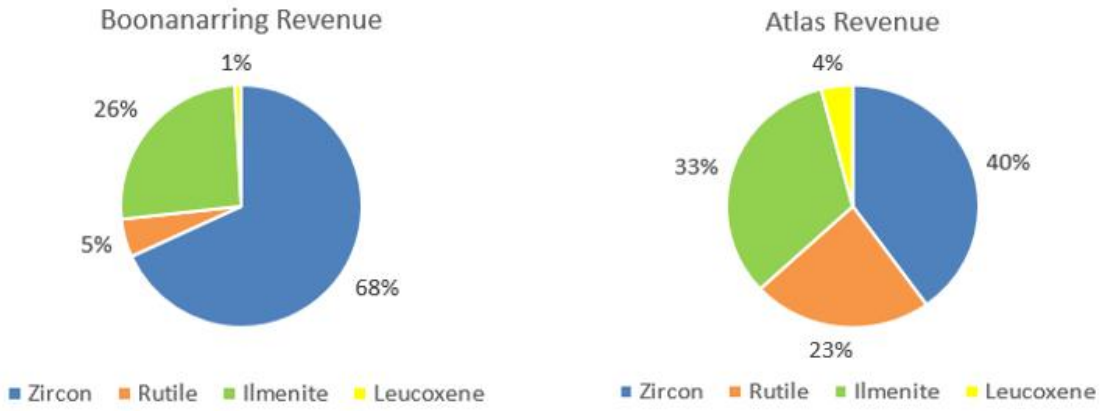
Figure 1.9 Benchmark of Boonanarring Start-up Capital/Revenue Ratio



Note:

- *Capital intensity is measured as start-up capital divided by the maximum annual revenue.*
- *Based on TZMI analysis using TZMI price forecasts and modelling except for Boonanarring which is based on Image physicals, operating and capital costs.*
- *31 advanced projects are included varying from brownfield to greenfield projects.*

Figure 1.10 Boonanarring and Atlas Revenue by VHM components in HMC



The potential cashflows, and hence financing for the Project, is underpinned by a life-of-project offtake agreement for all HMC produced.

1.1.6 Project Sensitivities

The Project is highly sensitive to changes in prices of the mineral sands products (in total) contained within the HMC and to variations in the A$:US$ exchange rate. A 10% increase from TZMI projected mineral sands commodity prices increases the NPV from A$135M to over A$190M, and a 20% increase in commodity prices increases the NPV to over A$250M.

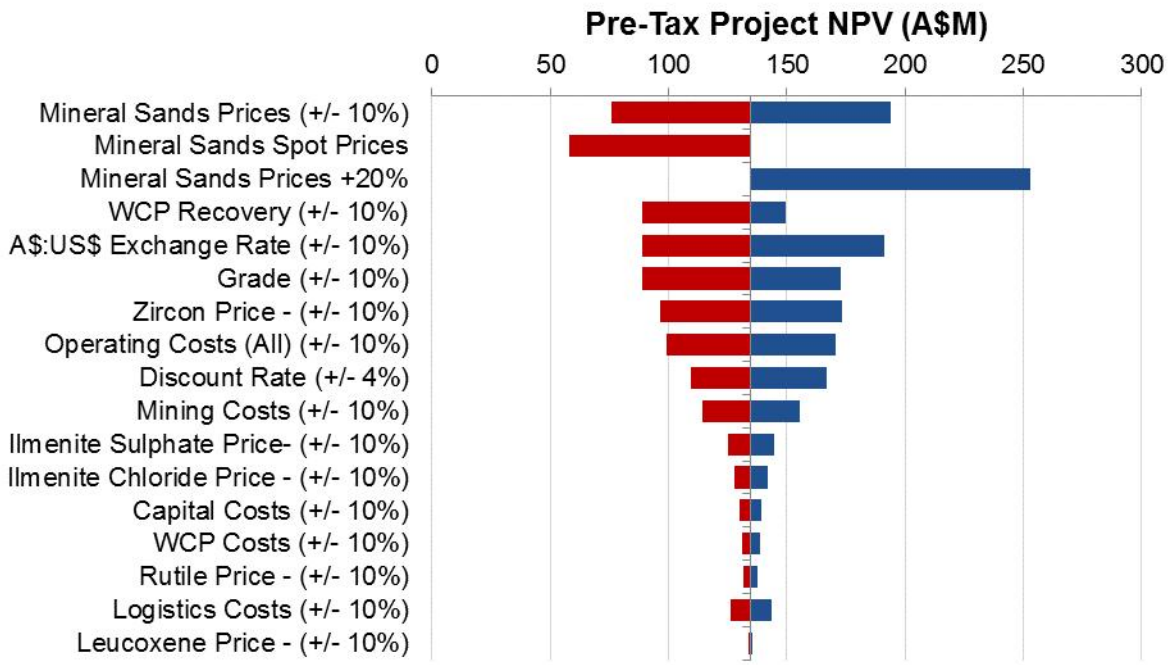
The Project NPV is sensitive to changes in zircon price as well as overall HM grade of the ore. The Project NPV is also relatively sensitive to mining costs, as they are a significant portion of overall operating costs.

The Project is relatively insensitive to the other individual mineral sands commodity prices (other than zircon), as well as to capital costs and operating costs (other than mining costs).

At current spot prices with no price escalations, the Project generates significant cash flows and has a pre-tax NPV of A$58M at an 8% discount rate and an IRR of 44%.

Sensitivities of the Project to various factors are illustrated in Figure 1.11.

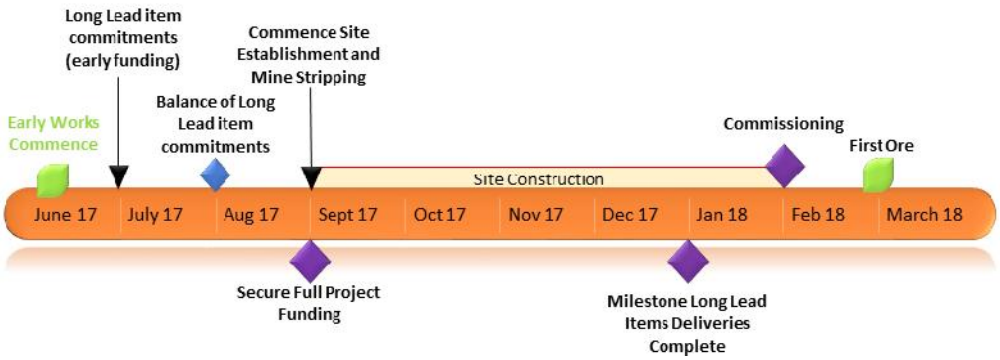
Figure 1.11 Project Sensitivity Analysis



1.1.7 Implementation Plan

The Boonanarring mine and site construction is scheduled to commence Q3 2017, followed by commissioning and first production by Q1 2018 (refer to Figure 1.12). A three month period for ramp up to full production has been reflected in the implementation plan.

Figure 1.12 Boonanarring Indicative Project Timeline



1.1.8 Key Risks

A total of five key risks were identified and classified as priority action risks. Each risk has been assigned within the owner's team and a treatment action plans have been developed to mitigate the risk.

The Key risks are listed below:

- Securing full Project funding
- An increase in working capital or preproduction expenditure resulting in top-up funding being required
- Delays in implementation resulting in additional capital, working capital or preproduction costs
- Negative movements in commodity prices and/or foreign exchange
  - Pre-financing: resulting in delays or difficulties in raising the required funds for development of the Project
  - Post-production: resulting in weaker than expected cash flows/returns from the Project
- Failure of the HMC offtaker to meet its obligations under the HMC Offtake Agreement, and in particular, to provide letters of credit on a timeous basis as required.

1.1.9 Conclusions and Recommendations

The BFS for the Boonanarring deposit provides a technically sound mining and processing approach based on conventional technology and mining methods to produce a saleable HMC product. The key risk for the Project is the approval of funds to continue the early works program and early commitment for long lead items, as well as cash flow during pre and post financing to production. Other risks identified during the BFS review were assessed as a relatively low risk level or were identified as manageable as part of normal operations.

This Project adopts a low capital approach compared to similar mineral sands projects by relocating an existing WCP in conjunction with utilising locally available logistics, power and community infrastructure.

Based on the financial outcomes of this study it is recommended that Image proceeds with financing and development, including obtaining initial funding to meet long lead item

commitments. Long lead items include the thickener, attritioner and high voltage both design and procurement. Early commitment will minimise delays to implementation of the schedule.

The addition of Atlas at the PFS level demonstrates the potential to extend the Project life by at least 3 years increasing the financial returns from the investment in the project.

1.2 Reliance on Experts

The BFS incorporates work from a range of specialist consultants and engineers as well as qualified and experienced Image employees. A list of study contributors is shown in Table 1.4.

Table 1.4 Study Responsibilities

	Scope	Responsibility
1	Study Management	BatteryLimits
2	Report Compilation	BatteryLimits
3	History & Ownership	Image
4	Geology and Resource	Image/Optiro
5	Mining, Mining Costs, and Reserves	Image/Optiro
6	Metallurgy	KeyPointe/AML
7	Process Engineering	BatteryLimits
8	Engineering	BatteryLimits
9	Disassembly, Transport and Reassembly	Image/BatteryLimits
10	Tailings	Image/ATC Williams
11	Project Operating Costs	BatteryLimits/ Image
12	Project Capital Costs	BatteryLimits/ Image
13	Infrastructure, Transport and Logistics	Image/ BatteryLimits/ Shawmac/ Wyntak
14	HMC Options	Image
15	Marketing and Product Specification	Image/ TZMI
16	Environment and Permitting	Image/Preston Consulting
17	Financial Analysis	Image/ PCF
18	High Level Implementation Plan and Schedule	BatteryLimits
19	Risk Management	BatteryLimits
20	Hydrological and Geotechnical	Image/ SRK/ URS

1.3 Mineral Resources

1.3.1 Boonanarring

The Boonanarring deposit is located in the NPB, Western Australia, approximately 120 km north of Perth. In 2013 Image prepared a Base Case Feasibility Study to assess the viability of mining and processing of ore from Boonanarring based on a Mineral Resource estimate prepared in 2013. This Mineral Resource estimate was updated in 2017 by Optiro Pty Ltd (Optiro) in accordance with the JORC Code (2012).

Optiro's January 2017 Mineral Resource estimate incorporates results from an additional 211 drill holes (for a total 8,300 m) drilled by Image between 2014 and 2016 and an additional 48 composite samples that were analysed to determine the heavy mineral (HM) assemblage components.

The Mineral Resource estimate for the Boonanarring deposit is reported in Table 1.5 at a 2.0% total HM cut-off grade. This cut-off grade was selected by Image based on technical and economic assessment carried out during feasibility study.

Table 1.5 Boonanarring Mineral Resource Estimate at a Cut-off Grade of 2.0% Total HM

Classification	Ore Tonnes (Millions)	THM %	Slimes %	Oversize %	% of total heavy mineral			
					Zircon	Rutile	Leucoxene	Ilmenite
Strandline mineralisation								
Measured	7.8	8.2	14	6.6	20.1	2.2	1.9	47.3
Indicated	19.5	6.0	17	8.0	21.6	2.4	1.8	50.2
Inferred	6.3	5.2	18	6.8	15.3	3.9	3.2	59.5
Sub-total	**33.5**	**6.3**	**17**	**7.5**	**20.2**	**2.6**	**2.0**	**50.8**
Overlying mineralisation								
Indicated	6.6	3.2	21	10.7	5.7	2.8	3.2	46.1
Inferred	3.6	3.3	25	12.5	2.7	2.3	4.0	25.5
Sub-total	**10.2**	**3.2**	**23**	**11.4**	**4.6**	**2.6**	**3.5**	**38.5**
Combined Strandline and Overlying								
Measured	7.8	8.2	14	6.6	20.1	2.2	1.9	47.3
Indicated	26.1	5.3	18	8.7	19.2	2.5	2.0	49.6
Inferred	9.9	4.5	21	8.9	11.9	3.5	3.5	50.3
Total	**43.7**	**5.6**	**18**	**8.4**	**18.1**	**2.6**	**2.2**	**49.1**

Table Note: Reported in ASX announcement 'Tonnage Doubles in Mineral Resources Update for Boonanarring Project' on 13 January 2017.

Ore definition drilling completed March 2017 (assay results pending), will increase Measured Resources for first 2-3 years of production

1.3.2 Atlas

In 2013, Image prepared a Base Case Feasibility Study to assess the viability of mining and processing of ore from its Atlas deposit, using a Mineral Resource estimate prepared in 2011 that was classified in accordance with the guidelines of the JORC Code (2004). This Mineral Resource estimate was updated in 2017 by Optiro in accordance with the JORC Code (2012).

Optiro's May 2017 Mineral Resource estimate incorporates results from an additional 241 drill holes (for a total 4,682 m) drilled by Image during 2012 and an additional 15 composite samples that were analysed to determine the HM assemblage components.

The Mineral Resource Estimate for the Atlas deposit has been reported in Table 1.6 at a 2.0% total HM cut-off grade.

Table 1.6 Atlas Mineral Resource Estimate at a Cut-off Grade of 2.0% total HM

Classification	Ore Tonnes (Millions)	THM %	Slimes %	Oversize %	% of total heavy mineral			
					Zircon	Rutile	Leucoxene	Ilmenite
Measured	9.9	7.9	16.1	5.8	10.5	7.2	4.2	49.1
Indicated	6.4	3.7	17.3	5.2	6.8	4.7	3.4	41.6
Inferred	1.8	4.0	19.9	7.2	4.8	4.4	3.3	29.0
Total	**18.1**	**6.0**	**16.9**	**5.7**	**9.3**	**6.4**	**4.0**	**46.1**

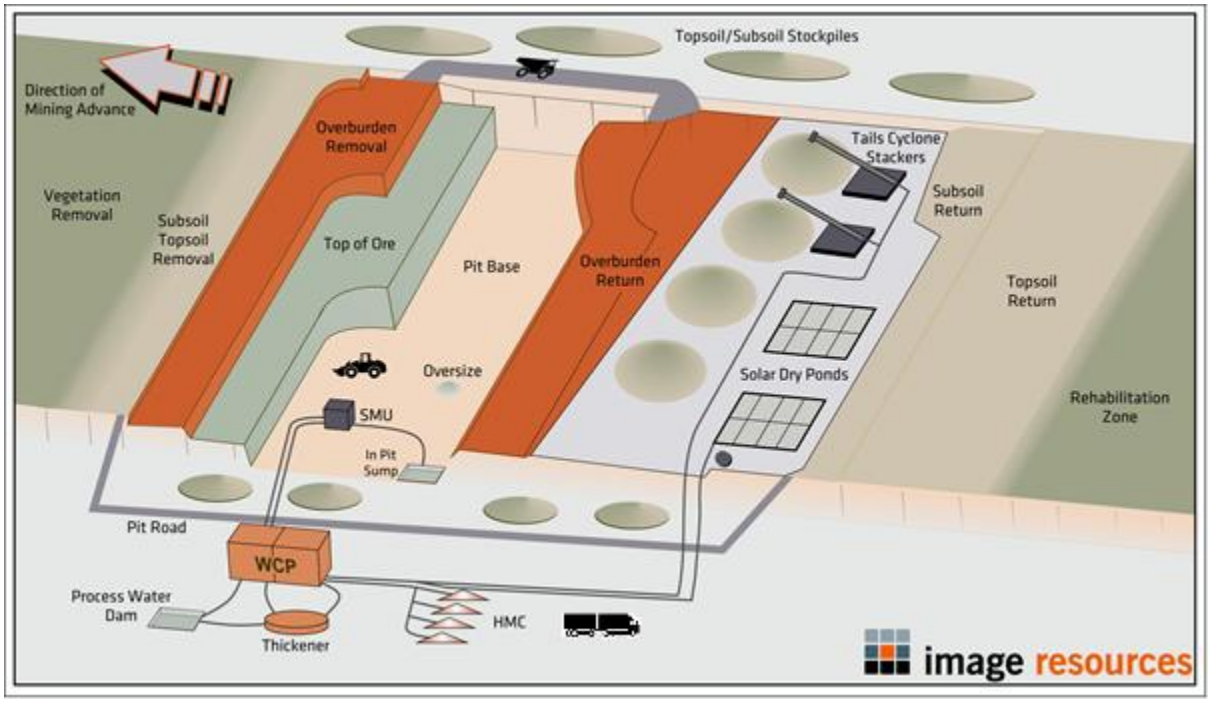
Table Note: Reported in ASX announcement '68% Increase in Mineral Resource Resources for Atlas Project' on 8 May 2017.

1.4 Mining

The mining and support earthmoving activities will be delivered under a Contract Mining Agreement, where the mining contractor will be responsible for all mining and associated earthworks using a standard Schedule of Rates contract incorporating normal dayworks provisions. Image will be responsible for statutory duties, technical services, potable water, power and dewatering operations.

The mining method will generally follow a typical sequence for mineral sand mining operations (refer to Figure 1.13).

Figure 1.13 Proposed Mining Method



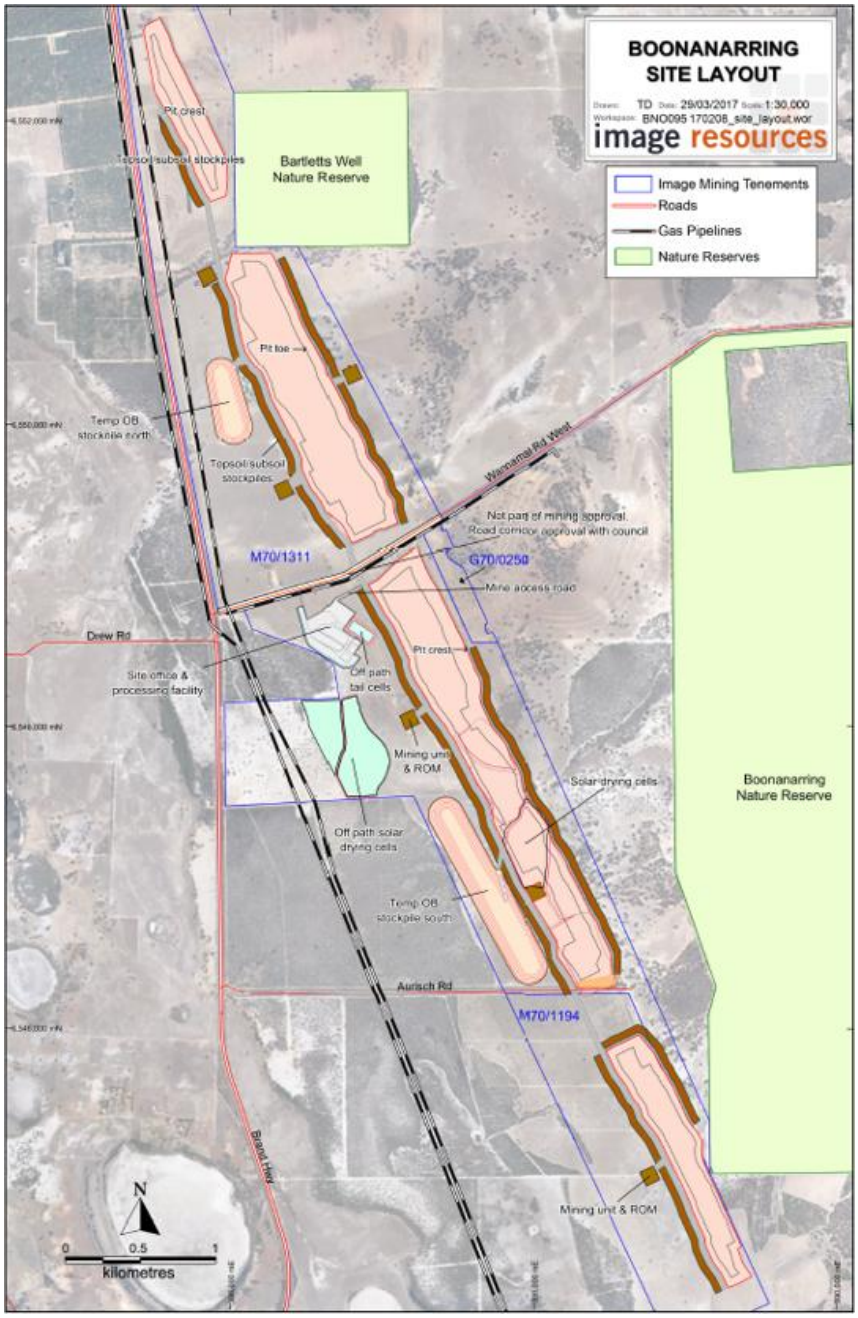
Scrapers and/or excavators and trucks will be employed to mine the ore to a stockpile located at the SMU. A Cat 988 loader or similar will then feed the SMU from the stockpile at a rate of 500 t/h. Using this type of fleet will give flexibility for ore blending, not only when mined but also off the stockpile at the SMU. In addition, use of this method will mean the SMU can stay in one place for up to 12 months, which will minimise downtime due to SMU relocations. The conceptual Boonanarring mine layout is shown in Figure 1.14.

The Boonanarring deposit is split into two strands; East and West. The eastern strand is generally higher in heavy mineral content than the lower grade western strand. To get consistency of the grade of the ore being fed to the WCP, the eastern and western strands will be blended. Ore feed has been constrained to a maximum of 500 t/h at 85% utilisation of SMU feed. This will be the primary production constraint.

Following initial pit establishment, the mine void will be progressively backfilled with overburden, sand tailings and clay fines. Dry clay from solar drying ponds will be mixed into the upper horizons of the sand tailings to improve soil quality prior to tailings profiling. The surface will then be re-contoured where necessary, in line with pre-mining surface contours or other agreed topography, before replacement of topsoil and subsoil.

Mine closure will involve the removal of all site infrastructure (certain infrastructure, such as bores, may be retained by prior agreement with landholders and the DMP), remediation of any contaminated soils and ground preparation (topsoil replacement, drainage works and ripping) for revegetation. Post-closure activities will include monitoring groundwater and the progress of rehabilitated areas towards agreed completion criteria will be measured.

Figure 1.14 Conceptual Boonanarring Mine Layout



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1.5 Mining Reserves

Conversion of Mineral Resources to Ore Reserves has been carried out through open pit optimisation and economic modelling using realistic and achievable operating parameters, costs and consensus pricing. At Boonanarring, during conversion from resource to reserve, 9.9 Mt was removed as inferred and 13.9 Mt removed from resources for quality and access resulting in a total reserve of 20 Mt @ 7.2% HM (refer to Table 1.7). The Atlas reserve of 9.5 Mt @ 8.1% HM is shown in Table 1.8.

Table 1.7 2017 Boonanarring Ore Reserves Summary

Classification	Ore Tonnes (Millions)	THM %	Slimes %	Oversize %	% of total heavy mineral			
					Zircon	Rutile	Leucoxene	Ilmenite
Strandline mineralisation								
Proved	5.8	9.1	14.2	6.6	21.6	2.2	1.9	48.5
Probable	11.9	7.0	16.8	7.8	24.0	2.5	1.6	51.4
Sub-total	**17.8**	**7.7**	**16.0**	**7.4**	**23.0**	**2.4**	**1.7**	**50.3**
Overlying mineralisation								
Probable	2.2	3.0	20.3	7.3	8.6	4.1	2.7	61.8
Sub-total	**2.2**	**3.0**	**20.3**	**7.3**	**8.6**	**4.1**	**2.7**	**61.8**
Combined Strandline and Overlaying mineralisation								
Proved	5.8	9.1	14.2	6.6	21.6	2.2	1.9	48.5
Probable	14.2	6.4	17.7	7.7	22.8	2.6	1.7	52.2
Total	**20.0**	**7.2**	**16.7**	**7.4**	**22.4**	**2.4**	**1.8**	**50.8**

Table Notes:

(1) Reported in ASX announcement 'Updated Ore Reserves for Boonanarring Project increases ore tonnes by 39%' on 10 April 2017.

(2) Ore Reserves are based upon a cut-off grade of 2% total heavy minerals (THM).

(3) The Ore Reserves are based upon an FX rate US$0.73:A$1.00; and the following commodity prices: ilmenite - $US144, leucoxene - $US522, rutile - $US936 and zircon - $US1,126.

Ore definition drilling completed for Boonanarring in March 2017 (assay results pending) will increase Proven Reserves tonnes for first 2-3 years of production

Table 1.8 2017 Atlas Ore Reserve Summary

Classification	Ore Tonnes (Millions)	THM %	Slimes %	Oversize %	% of total heavy mineral			
					Zircon	Rutile	Leucoxene	Ilmenite
Probable	9.5	8.1	15.5	5.2	10.6	7.5	4.5	50.7
Total	**9.5**	**8.1**	**15.5**	**5.2**	**10.6**	**7.5**	**4.5**	**50.7**

Table Notes:

(1) Reported in ASX announcement 'Ore Reserves update for 100% owned Atlas Project' on 30 May 2017.

(2) Ore Reserves are based upon a cut-off grade of 2% total heavy minerals (THM).

(3) The Ore Reserves are based upon an FX rate US$0.73:A$1.00; and the following commodity prices: ilmenite - $US171, leucoxene - $US522, rutile - $US936 and zircon - $US1,126.

1.6 Mining Production Schedule

At both Boonanarring and Atlas, the mining sequence has been designed to maximise the grade of ore fed to the plant in the early years. The monthly mining schedule for Boonanarring and Atlas is provided in Figure 1.15 while the SMU feed tonnage and grade is provided in Figure 1.16.

A three-month relocation period has been allowed for between the Boonanarring and Atlas operations. The ramp-up period for Atlas is one month.

Consideration has also been given to minimising post mining waste rehandling costs. At Boonanarring, ore and waste mined total 9.25 million banked cubic metres (BCM), or 17.27 million tonnes, and 62.61 million BCM respectively for an overall strip ratio of 6:1 (low grade ore included as waste). At Atlas, ore and waste mined total 4.97 million BCM, or 9.45 million tonnes, and 8.06 million BCM respectively for an overall strip ratio of 1.4:1.

Table 1.9 and Table 1.10 shows Boonanarring and Atlas production schedules.

Figure 1.15 Project Mining Schedule

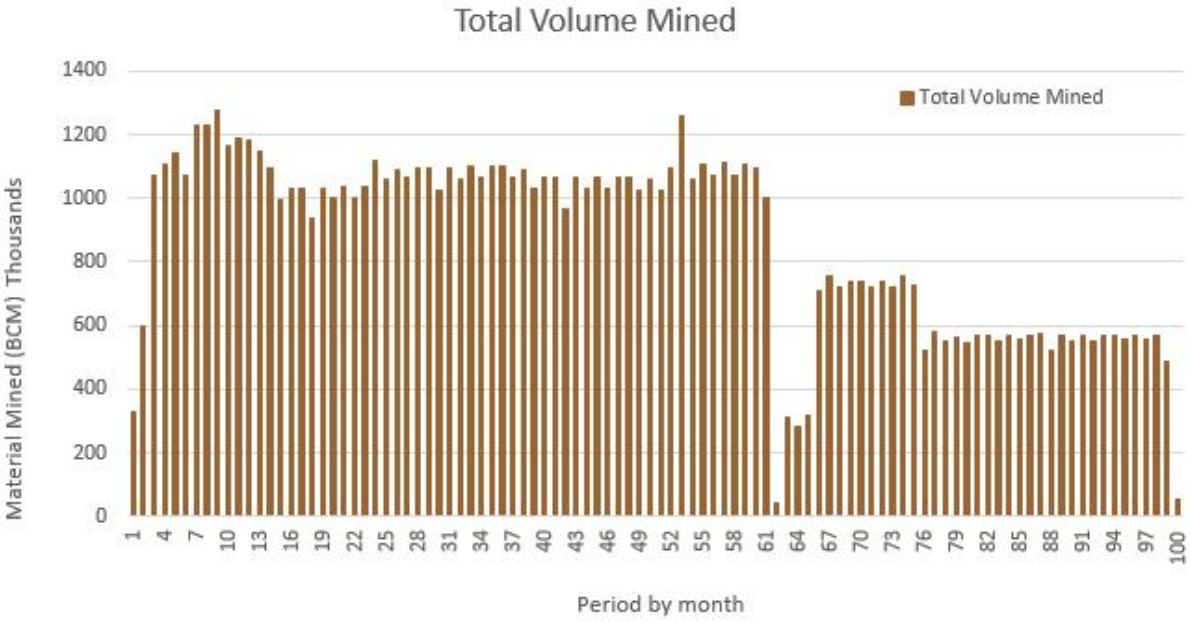


Figure 1.16 Project SMU Feed Tonnes and Grade

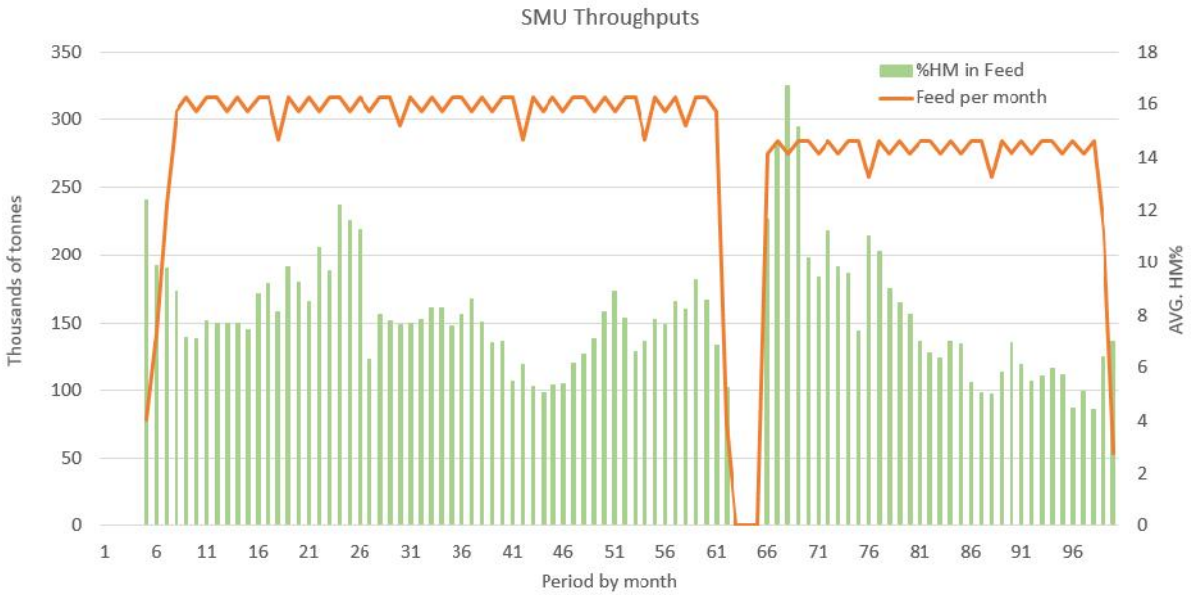


Table 1.9 Boonanarring Production Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5	Life of Mine
Feed to SMU (kt)	2,953	3,737	3,726	3,755	3,099	17,270
HM Grade (%)	8.1	9.6	7.9	6.5	7.6	8.0
Ilmenite (%)	49.0	47.9	57.2	46.9	50.7	50.4
Leucoxene (%)	1.5	2.3	1.7	1.6	1.3	1.7
Rutile (%)	2.3	2.1	2.5	2.7	2.5	2.4
Zircon (%)	25.9	23.1	18.6	27.9	18.7	22.9

Table 1.10 Atlas Production Schedule

	Year 1	Year 2	Year 3	Life of Mine
Feed to SMU (kt)	3,078,476	3,358,496	3,009,869	9,446,861
HM Grade (%)	11.57	7.24	5.76	8.18
Ilmenite (%)	13.23	8.69	7.20	10.45
Leucoxene (%)	3.57	5.18	5.27	4.46
Rutile (%)	7.56	7.59	6.91	7.42
Zircon (%)	53.08	50.22	45.09	50.39

The combined Life of Mine (LoM) production from Boonanarring and Atlas is estimated at 1.83 Mt of HMC over 8 years.

1.7 Metallurgy

This section describes the results of the metallurgical testwork completed on the Boonanarring deposit. In addition, preliminary results from metallurgical testwork on Atlas have been included in the following Tables. A more detailed testwork program will be conducted on Atlas during a future BFS phase. The metallurgical study comprised two sections:

- testwork for the confirmation of a wet gravity circuit metallurgical flowsheet to produce a HMC, and
- testwork for the confirmation of a Drymill circuit metallurgical flowsheet to produce saleable ilmenite, zircon, rutile and leucoxene products.

The objective of the wet gravity testwork was to develop the circuit for processing the Boonanarring ore by utilising the existing equipment from the WCP acquired in 2016.

The metallurgical testwork was conducted at Allied Mineral Laboratories Pty Ltd (AML), Osborne Park, Perth, Western Australia. The bulk samples compositions are shown in Table 1.11.

Table 1.11 Bulk Sample Composition

Deposit	Slimes[1] %	OS[2] %	HMC %	Ilmenite %	Rutile %	Leucoxene %	Zircon %
Boonanarring	12.9	6.8	12.2	5.9	0.2	0.3	3.5
Atlas	9.7	9.9	9.6	3.9[3]	-	-	0.7

(1) Slimes <63 microns

(2) Oversize >2.0 millimetres

(3) Combined TiO_2 products

The metallurgical testing to confirm the wet gravity testwork flowsheet was based on the use of conventional wet gravity separation equipment. The flowsheet as tested is conservative in nature with the inclusion of a tailings scavenger spiral stage to reduce HM losses and will be amenable to handling any changes in HM content that may arise during mining operations.

The wet plant metallurgical testwork flowsheet included; a screen trommel, a de-sliming cyclone, six stages of spiral separation, an attritioner and an upward current classifier. Analysis was by heavy liquid separation (at specific gravity of 2.9), XRF assay and QEMSCAN analysis.

This wet gravity testwork flowsheet, produced a HMC with the following metallurgical performance as shown in Table 1.12.

Table 1.12 HMC Grade and Recovery from Wet Gravity Flowsheet

Deposit	HMC %	Ilmenite %	Rutile %	Leucoxene %	Zircon %
Boonanarring					
Grade	97.5	51.8	1.9	1.3	34.3
Recovery	82.7	89.3	75.9	60.0	98.1
Atlas					
Grade	97.5	42.7(1)	-	-	13.8
Recovery	76.3	80.3(1)	-	-	93.5

(1) ilmenite + rutile + leucoxene

The laboratory drymill metallurgical testwork flowsheet was designed to produce marketable ilmenite, rutile and zircon products using a conventional processing circuit with its primary aim to replicate product qualities as produced for the 2013 feasibility study and establish mass yields for the drymill products.

The drymill metallurgical testwork flowsheet produced; two ilmenites, one rutile, one leucoxene and one zircon product. The drymill circuit metallurgical testwork flowsheet included; electrostatic separation, magnetic separation, wet gravity separation and attritioning. Analysis was by XRF analysis. The testwork has resulted in the following 'indicative only' mineral recoveries (refer to Table 1.13).

Table 1.13 Product Recovery from Drymill Flowsheet

Deposit	Ilmenite (primary + secondary) %	Rutile %	Leucoxene %	Zircon %
Atlas	94.0	90.0	82.0	88.0

1.8 Process Plant

The BFS is based on the acquisition of the Mindarie WCP and ancillary equipment shown in Figure 1.17. The existing plant will be relocated to WA and it will undergo a fit-for-purpose modification to treat the Boonanarring ore. The utilisation of existing equipment will be maximised and the plant will be reconfigured by re-purposing and re-sequencing the order the equipment as required. New equipment will include an attritioner and an upward current classifier.

Figure 1.17 Mindarie WCP

The mineral processing operation will consist of two main sections:

- Slurry mining unit (SMU)
- Wet concentrating plant (WCP).

Selection of the key process stages and parameters were based upon the metallurgical testwork conducted by AML. The SMU primarily consists of:

- feed bin, vibrating grizzly feeder
- scrubber feed conveyor
- a rotating drum scrubber with trommel screen, and pumping system
- supporting equipment on a transformer skid.

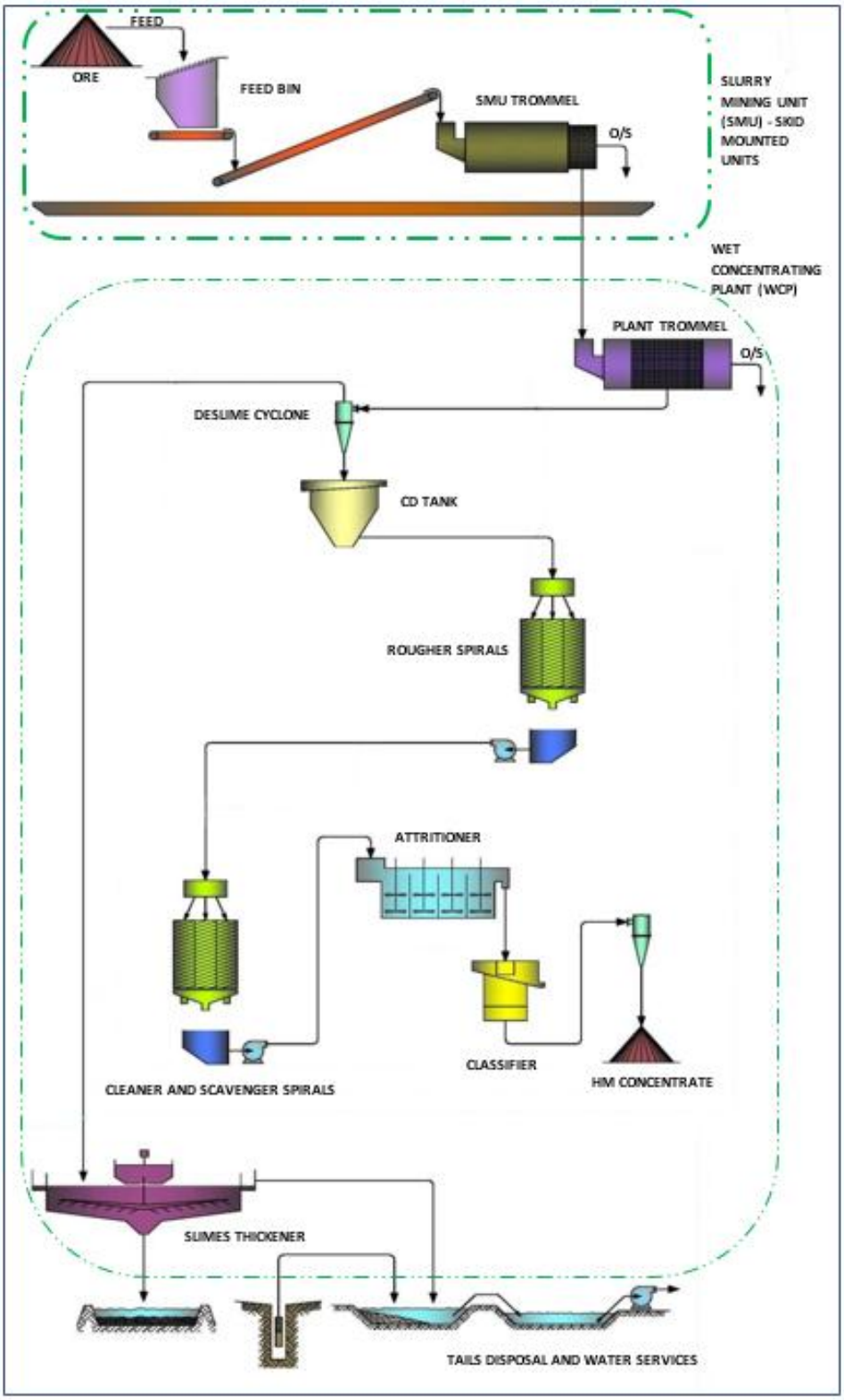
The function of the SMU is to screened for oversize material, de-agglomerate the ore and to pump a slurry feed to the WCP. The SMU will be semi-mobile and will be relocated annually as mining progresses, thus minimising the haul distance to and from the mining area.

The WCP receives slurry which is further screened for oversize and de-agglomerated in the plant trommel scrubber and deslimed by cyclones. The slurry density is controlled in the Constant Density tank before being pumped to the spiral circuit. The spiral circuit consists of rougher, cleaner and scavenger stacks producing sand tails and a concentrate stream. The concentrate stream is dewatered by cyclones and further cleaned in an attritioner. An upward current classifier in a closed circuit with a dewatering cyclone and a stack of spirals provides the final stages of HMC cleaning. The HMC from the upward current classifier underflow is pumped to stacker cyclones and deposited to stockpiles located on the dewatering HMC pad.

The processing facility will produce two types of tailings; a coarse sand tails and a fine slimes tails. The sand tails from the WCP is concentrated by a skid-mounted dewatering cyclone and the underflow is used as backfill for the mining void. The slimes stream is thickened and thickener underflow is transferred to paste cells solar drying ponds. Dry slimes will be carted and/or spread across the top of the deposited sand tails and ploughed in to achieve the required composition of slimes and sand prior to final top soil rehabilitation.

Process water is recovered from the sand tails stacker dewatering cyclone overflow, thickener overflow, paste cells decant and WCP dewatering cyclones overflow. Any surplus water decanted from the paste cells is pumped directly to the SMU water tank for recycling. Recycled process water from other units is discharged to the settling pond and pumped back to the plant via the process water pond. Make-up water is supplied from bore pumps. Figure 1.18 illustrates a simplified block flow diagram of the Boonanarring plant with tails disposal and water facilities.

Figure 1.18 Boonanarring Mineral Processing Operation

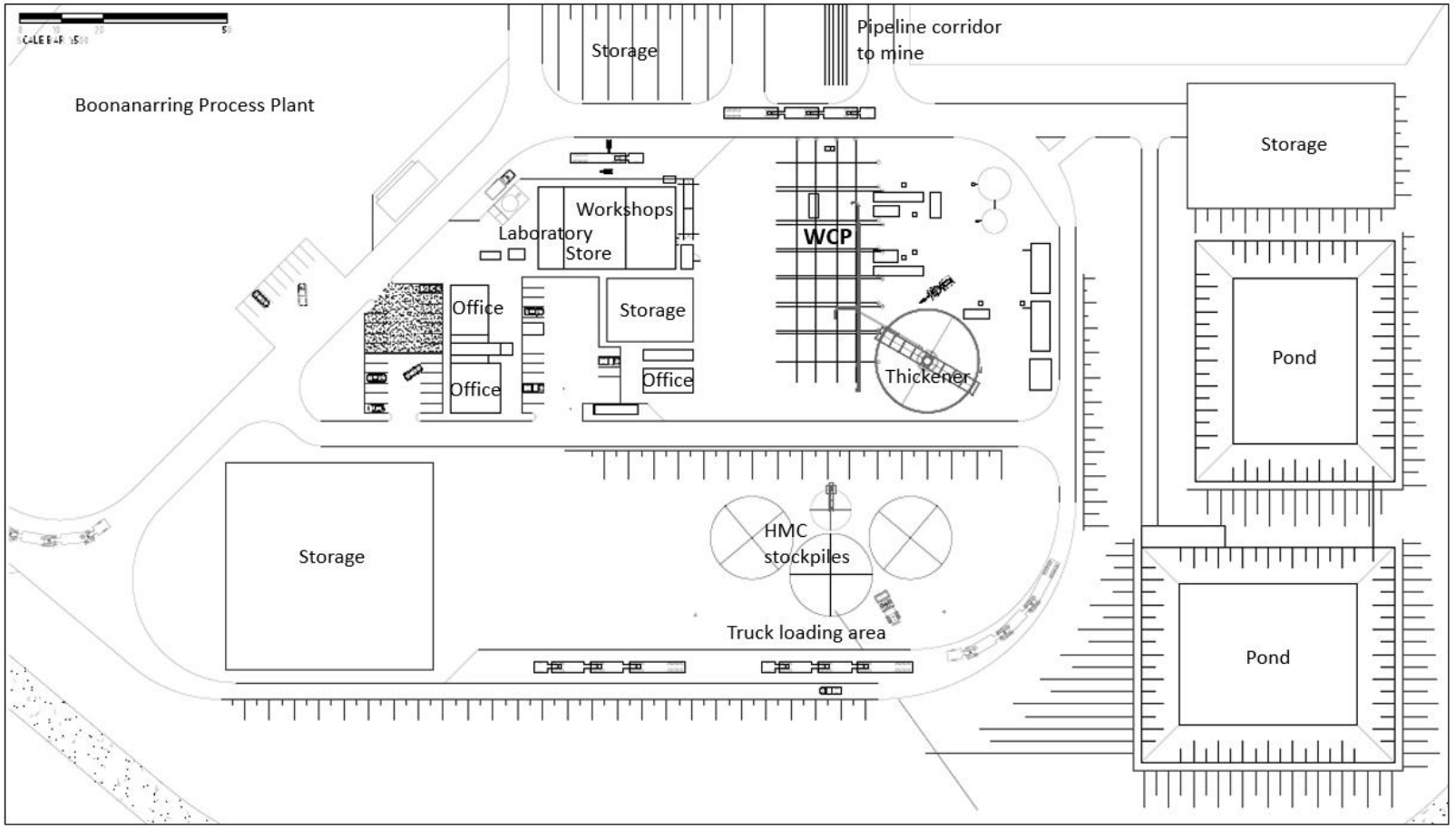


1.9 Infrastructure, Power, Water and Logistics

The Plant and Infrastructure are shown in Figure 1.19 and consist of:

- Process plant and associated equipment, offices and maintenance facilities
- Power supply and reticulation system including a new HV substation
- Process water dams
- Mine area and waste dumps
- Water bores and pipe routes
- Modifications to access roads to the plant, mine and plant access roads and other facilities.

Figure 1.19 Proposed Boonanarring Site Infrastructure Layout



1.10 Power

The power requirements for the main process plant and mining have been calculated at a total connected load of 7.4 MW including all duty and standby equipment with an estimated maximum running load in the final years of Boonanarring of 4.5 MW. A 22kV HV connection from the local Western Power grid will be used to supply the Boonanarring site power.

The main incoming 22kV HV Western Power supply will be converted and feed a 22/11KV 8.5 MVA transformer to provide the site power requirements suitable for connection to match the existing equipment acquired in 2016.

1.11 Water

A simplified process water balance was developed for Boonanarring using a steady-state mass balance to determine the water consumption requirements. No allowance was made for potable and wash water in the water balance.

The following water conservation factors are included in the water balance:

- The use of a thickener in the process plant to limit water contents in the clay fines disposed to solar drying cells;
- Decantation of excess water from the surface of the solar drying cells;
- Sand tailing water recycle through a cyclone and return of excess sand cell water to the process;
- Passive in-pit dewatering via temporary drains and sumps; and
- Interception of water shed from HMC stockpiles.

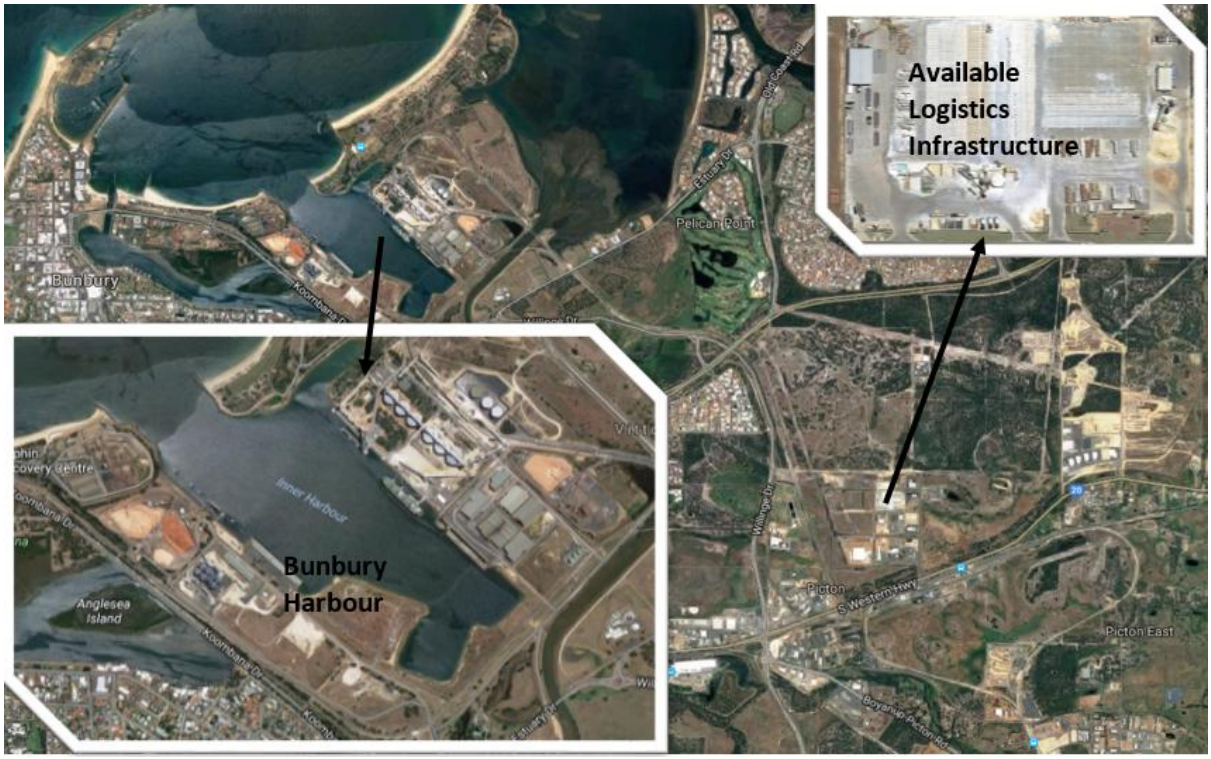
The base case scenario resulted in demand of 1.86 giga-litres per year (GL/y). The Project has secured a water abstraction licence of 2 GL/y from the Perth - Yarragadee North aquifer for mineral sands ore processing and mining operations.

1.12 Logistics and Site Access

The Boonanarring area is adjacent to the Brand Highway, one of the major transport routes to the north of Western Australia. The proposed site for the processing plant adjacent to the orebody will be accessed from Wannamal Road West and Brand Highway within approximately 500 metres from the intersection of these roads.

The Mine site will have a weighbridge to facilitate sign-off deliveries of HMC for shipments. During operations, all HMC supply-chain activities will be undertaken by a logistics contractor. The contractor will employ a team to oversee and arrange all activities that will allow HMC to be transported, stockpiled and loaded for sale to customers CIF Bunbury port. Available logistics infrastructure at Bunbury is shown in Figure 1.20.

Figure 1.20 Available Logistics Infrastructure at Bunbury



1.13 Capital Cost Estimate

The capital cost estimate for the Project has been prepared in accordance with capital cost estimating guidelines and BFS study standards. The inputs to this Study generally meet or exceed the requirements for BFS capital estimating. The total capital cost estimate complies with the required accuracy range of ⟨15%. All cost data presented is in Australian dollars (A$M). Table 1.14 and Table 1.15 details the inputs into the financial model.

Table 1.14 Summary Project Capital Costs

Capital Costs	Boonanarring A$M	Atlas A$M	Project A$M
Total Plant	31.1	19.6	50.7
Capitalised Operating Costs & Other Development Capital	20.6	-	20.6
Total Development Capital	**51.7**	**19.6**	**71.3**
Sustaining & other Capital	5.0	1.5	6.5
Total Project Capital	**56.7**	**21.1**	**77.8**

Table 1.15 Project Capital Costs

Capital Costs	Boonanarring A$M	Atlas A$M	Project A$M
Indirects(1)	0.7	0.6	1.3
Directs(1)	22.4	11.4	33.8
EPCM(1)	3.3	2.4	5.7
Contingency(1)	2.7	0.0	2.7
Other	2.1	5.2	7.3
Total Process Plant	**31.1**	**19.6**	**50.7**
Mining/Development/Other			
Mining Contractor Mobilisation	1.4	-	1.4
Pre-Strip Overburden/ Ore	8.7	-	8.7
Development Capital & Owners Preproduction	10.4	-	10.4
Capitalised Operating Costs & Other Development Capital	**20.6**	**-**	**20.6**
Total Development Capital	**51.7**	**19.6**	**71.3**
Sustaining Capital			
Sustaining Capital	5.0	1.5	6.5
Total Project Capital	**56.7**	**21.1**	**77.8**

(1) Total Process Plant direct, indirects, EPCM & contingency for Boonanarring is $29M plus early commitments pre-financing of $0.1M for a total of $29.1M.

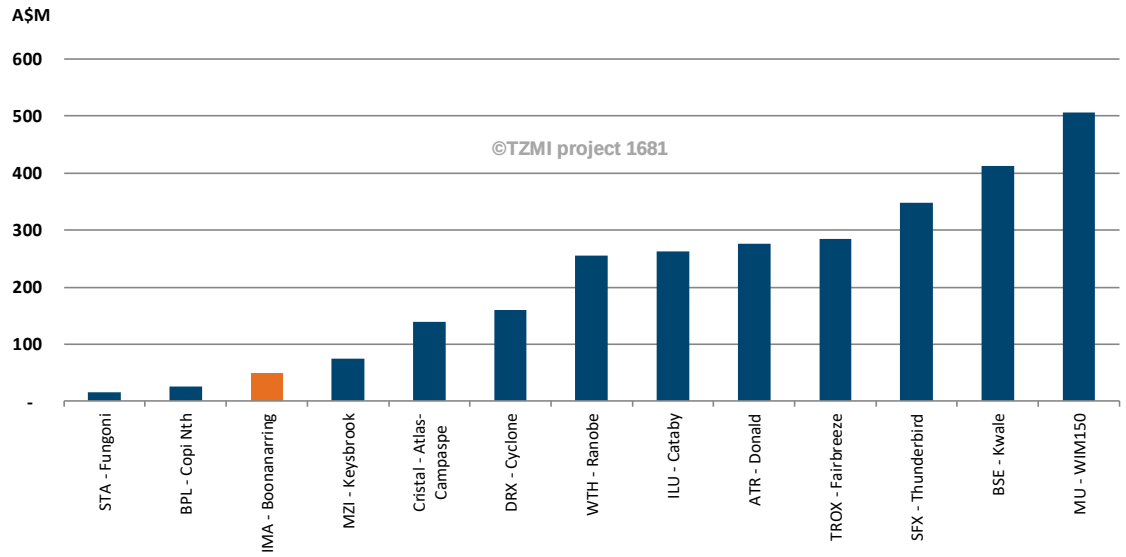
The estimated peak cash draw for the development of Boonanarring is $63.7M including working capital. Figure 1.21 and represents the benchmark of capital cost for Boonanarring against other mineral sands projects. This indicates that the project has favourable capital intensity and potential for rapid payback of development capital.

The estimated development capital includes mine establishment, relocation of plant and equipment, installation of fixed plant, land and infrastructure requirements. The estimated cost does not include escalation. The detailed economic model has been used to estimate working capital needed to operate between start-up and positive cashflow.

EPCM costs have been calculated for services provided from commencement of detailed design up to and including pre-operational testing (excluding wet commissioning and ramp-up activities).

There is no capital cost outlay for logistics or off site port works. Any capital costs are covered within the operational costs for logistics, transport, wharf and shipping charges, as a contracted rate per tonne.

Figure 1.21 Benchmark of Capital Cost for Various Mineral Sands Projects



Note:
- *Data sourced from company reports in the public domain.*
- *United States dollar capital costs are converted to Australian Dollars using an exchange rate of 0.75 (AUD:USD).*
- *Cataby has a range of A$250M to A$275M, midpoint used in this analysis.*
- *Ranobe capital cost is based on the 2012 DES estimate.*

1.14 Operating Cost Estimate

The operating cost estimate covers all site operating costs including General and Administrative costs. The basis for the estimation of major operating cost elements are:

- mining variable costs – quotation from a mining contracting pre-qualification tendering process based on detailed monthly movement schedules for ore and waste
- mining fixed costs - quotation from a mining contracting pre-qualification tendering process

- dayworks costs – estimate by Project team based on recent similar project experience and pre-qualification mining rates
- processing variable costs including supplier quotations where possible, and otherwise using recent experience from similar projects
- solar drying pond and booster pumping costs – estimate by BatteryLimits with expert consultancy input based on recent similar project experience
- owner's fixed and labour costs – Project team and BatteryLimits with expert consultancy input based on detailed manning schedules and recent similar project experience
- logistics costs – Wyntak logistics consultancy based on detailed analysis of optimum haulage configurations and quotations from major contractors

The operating cost estimates and key metrics are summarised in Table 1.16.

Table 1.16 Project Operating Cost Summary

Item	Boonanarring		Atlas	
	A$M	A$/t HMC(1)	A$M	A$/t HMC (1)
Mining	$206.8	$185.5	$62.5	$87.80
Processing	$34.3	$30.7	$19.7	$27.7
Direct cost	$241.1	$216.2	$82.2	$115.5
Land Access	$0.6	$0.5	$0.5	$0.6
Native Title Payments	-	-	$1.5	$2.2
Site Admin	$19.8	$17.8	$18.9	$26.6
Logistics(2)	$73.9	$66.3	$50.9	$71.6
Subtotal Operating Cost	**$335.4**	**$300.8**	**$154.0**	**$216.5**
Royalties (3)	$26.0	$23.4	$10.9	$15.4
MRF Levy (4)	$0.1	$0.1	$0.1	$0.1
Total Operating Costs (5)	**$361.5**	**$324.2**	**$165.0**	**$232.0**

(1) Based on total HMC production of 1,115kt for Boonanarring and 711kt for Atlas

(2) Includes road transport, port charges and shipping

(3) Royalties are charged on the value of HMC sold at 5%.

(4) Mineral Rehabilitation Fund Levy is charged at an average rate per hectare of disturbance.

(5) Excluding capitalised prestrip of A$7.5 million included in initial development capital

1.14.1 Mining Operating Cost

Mining costs have been derived from the 2016 prequalification mining contract tender where shortlisted mining companies presented their cost assumptions based on the monthly production schedule.

A summary of the rates used for financial modelling are shown in Table 1.17. The fixed mining costs are shown in Table 1.18.

The Atlas PFS applies the same cost per unit mined and the same fixed costs as the Boonanarring BFS.

Table 1.17 Variable Mining Cost Assumptions

Variable mining costs	Units	Rate
Waste	A$/bcm	2.23
Ore	A$/bcm	2.25
SMU Feed & Grade Control	A$/t ore	1.06

Table 1.18 Fixed Mining Overhead Cost Assumptions

Fixed mining costs	Unit	Rate
Fixed Mining Costs	A$Mpa	6.61
Owner's Mining Labour Costs	A$Mpa	0.54

1.14.2 Plant Operating and Administration Cost

The operating cost estimate includes five major costs – process plant power, reagents, labour, maintenance supplies and SMU moves - as direct processing costs, as shown in Table 1.19 and Table 1.20. The Atlas PFS uses the same operating cost per unit as the Boonanarring BFS.

Table 1.19 Processing Cost Summary

Cost category	Variable / Fixed	A$Mpa
Processing Cash Costs		
Power[1]	Variable	3.57
Reagents	Variable	0.56
Labour	Fixed	5.14
Maintenance Supplies	Fixed	0.85
SMU Moves	Variable	0.05
Total Processing Cash Costs		**10.17**
Site General & Administration Costs		
Environmental Monitoring and Consultants	Fixed	0.15
Power for Non-Process Infrastructure	Fixed	0.11
Other Fixed Costs	Fixed	1.62
Total Site General & Administration Costs		**1.88**
Total Processing and Site General & Administration Costs		**12.05**

(1) Based on mid case (Year 3)

Table 1.20 Boonanarring Direct Processing Costs

Processing cost analysis	LOM A$/t Ore	LOM A$/t HMC	LOM A$M
SMU/Slimes Thickening – Fixed	0.10	1.6	1.8
SMU/Slimes Thickening – Variable	0.41	6.4	7.1
WCP – Fixed	0.11	1.7	1.9
WCP – Variable	0.66	10.2	11.4
Direct Labour	0.70	10.8	12.1
Total Direct Processing Costs	**1.99**	**30.7**	**34.3**

Atlas processing costs are based on the same fixed and variable (A$/t HMC) components as for the Boonanarring BFS.

1.14.3 Other Operating Costs

Atlas site administration costs are based on the same fixed costs ($1.62Mpa) as for the Boonanarring BFS except for an additional allowance of $150k per month for camp related costs. Atlas financial model applies the same logistics costs as for the Boonanarring BFS except for an additional $5/t of transport.

The main operating cost exclusions are:

- Marketing and sales costs including certificates of analysis for products
- Accommodation and messing for Boonanarring as there will be no onsite camp.
- Head office corporate costs
- Exploration
- Contingency and escalation
- Financing costs.

1.15 Marketing and Product Specifications

1.15.1 Boonanarring Products

The Project will produce HMC containing four main products: ilmenite (both sulphate and chloride), leucoxene, rutile and zircon, with the primary product being zircon which is expected to account for between 60 and 70% of value within the HMC. Total and average annual production rates of HMC and contained products expected to be extracted from the HMC are shown in Table 1.21 and Table 1.22 for Boonanarring and Atlas respectively.

Table 1.21 Boonanarring HMC Shipped and Final Products Contained in HMC

Boonanarring Product Shipped (dmt)	Year 1	Year 2	Year 3	Year 4	Year 5	LOM
HMC	175,000	300,000	240,000	200,000	200,000	1,115,000
Zircon	54,621	85,081	55,151	67,263	48,829	310,947
Rutile	3,828	5,669	5,420	5,003	4,622	24,542
Ilmenite	94,206	153,764	147,867	101,603	109,294	606,734
Leucoxene	1,872	4,984	3,057	2,265	1,799	13,976

Table 1.22 Atlas HMC Shipped and Final Products Contained in HMC

Atlas Product Shipped (dmt)	Year 1	Year 2	Year 3	Year 4	LOM
HMC	190,000	220,000	220,000	81,288	711,288
Zircon	26,496	19,927	16,168	4,131	66,722
Rutile	13,953	16,604	15,181	4,625	50,365
Ilmenite	98,779	109,469	99,234	31,683	339,165
Leucoxene	5,293	9,275	9,563	2,886	27,017

1.15.2 Product Grades and Specifications

Samples of final product quality products were produced in testwork.

Four different TiO_2 products are expected to be produced from the Boonanarring HMC:

Rutile	TiO_2~95.5% Fe_2O_3~0.85%
Leucoxene	TiO_2>69%, Fe_2O_3~24%
Chloride Ilmenite	TiO_2~60%, Fe_2O_3~33%
Sulphate Ilmenite	TiO_2~54.5%, Fe_2O_3~27.4%

In addition, Boonanarring HMC will contain a significant quantity of zircon. The Zircon subsequently extracted is expected to be sold as the equivalent of standard grade but there is potential for some premium grade product.

Zircon (Premium)	ZrO_2>66%, Fe_2O_3~0.08
Zircon (Standard)	ZrO_2~65%, Fe_2O_3~0.20

1.15.3 Estimated Value of Final Products Contained in HMC

Table 1.23 and Table 1.24 show the forecast FOB price of the heavy minerals within the HMC of production in $US/dmt over the life of the Project.

Table 1.23 Boonanarring – Forecast FOB Value of Final Products Contained in HMC

Boonanarring Pricing (US$/dmt)	2018	2019	2020	2021	2022	Long Term
Ilmenite (Sulphate)(1)	150	165	172	174	174	167
Ilmenite (Chloride)(2)	171	191	215	234	250	258
Leucoxene(3)	527	606	729	754	750	750
Rutile(2)	753	865	1,041	1,077	1,071	1,070
Zircon (standard)(4)	854	924	1,009	1,112	1,206	1,330

(1) Price forecast for primary ilmenite assumes 10% discount to the market consultant sulphate ilmenite price forecast.

(2) Price forecast for Chloride ilmenite and rutile are in line with the market consultant price forecast for these products.

(3) Price forecast for leucoxene is based on a 30% discount to rutile prices

(4) Standard grade zircon prices applied to Boonanarring product are based on premium zircon less a US$75 per tonne discount.

Table 1.24 Atlas – Forecast FOB Value of Final Products Contained in HMC

Atlas Pricing (US$/dmt)	2023	2024	2025	2026	Long Term
Ilmenite (Sulphate)	185	185	185	185	185
Ilmenite (Chloride)	258	258	258	258	258
Leucoxene	750	750	750	750	750
Rutile	1,070	1,070	1,070	1,070	1,070
Zircon (standard)	1,405	1,405	1,405	1,405	1,405

The basis of the HMC offtake is for the HMC to be priced based on Delivery to China (CIF). Shipping costs are estimated at US$20 per tonne.

1.15.4 HMC and Zircon Off-Take Agreements

The BFS base case is for sale of HMC CIF Bunbury and for downstream processing into final products in China by the buyer, with zircon being on-sold by the processor to Orient Zirconic Science and Technology Industry Co. Ltd. (OZC). OZC has agreed to suspend the current zircon offtake agreement with Image in order to allow Image to sell HMC to Natfort. In return, Natfort has committed to suppling the resulting zircon products to OZC.

Image has entered into a life-of-mine binding offtake agreement for HMC produced from Image's North Perth Basin tenements, including Boonanarring and Atlas, with a China based company (Natfort - Natfort Zirconium and Titanium Co Ltd) that has an existing dry plant facility in China. Natfort is a privately owned company engaged in the processing of HMC purchased from minerals sands producers and/or brokers for separation into final TiO_2 and zircon products. Natfort has processed material from Murray Zircon in the past and has sold zircon to OZC. The offtake agreement is based on testwork carried out by the Natfort using samples of HMC from Boonanarring.

HMC will be sold based on an agreed estimate of value of contained HM products and CIF market prices for those products less an allowance for port handling and transport to the drymill in China (A$11.50/dmt), processing costs (A$50/dmt), estimated recoveries (estimated at 3-4% less for zircon and for TiO2 products) less a 5% profit margin; HMC sales will be supported by a Letter of Credit to be based on an agreed estimate of value of the HMC; andall the resulting zircon production will be sold to OZC.

Additional key terms of the offtake agreement are:

- Image may terminate or change the agreement:
  - in the event it finds, or receives an offer from, an alternative off-taker at a higher price or longer term basis and Natfort is unwilling or unable to match the alternative.
  - if Image changes from offering to sell HMC, to offering to sell Non-Magnetic Concentrates.
  - if Images processes its HMC into final products in Australia, at any point after five years from receipt by Natfort of first HMC shipment.

The key terms of the offtake agreement have been used for the project revenue sensitivities, with mineral sands prices, and in particular zircon, having the greatest impact on project revenue.

1.16 Human Resources

The total operational workforce is estimated to be 123 people, 98 of which will be employed on a continuous shift based roster. The majority of the proposed workforce (nominally 82) will be employed by the mining contractor to undertake all earthworks activities and associated services. Image's proposed workforce includes 41 personnel working across five areas of the operation.

Upon completion of mining at the Boonanarring deposit, the full Image workforce will continue their employment at Atlas. As such, the current study proposes similar employee numbers and organisational structure to that of Boonanarring at Atlas.

It is expected that most of the workforce recruitment for the Project will focus around the Gingin Shire and surrounding regional areas, along with the northern suburbs of Perth. Employees will commute to and from site daily. However, temporary overnight accommodation is being investigated as a management strategy to address potential issues arising from fatigue management.

There may be the requirement to recruit professional and specialised employees from other regions of Western Australia and around Australia. Western Australia has one of the best established mineral sands industries in the world. Image will look to outsource certain other activities where industry specific skills and experience are crucial to the ongoing success of the operation.

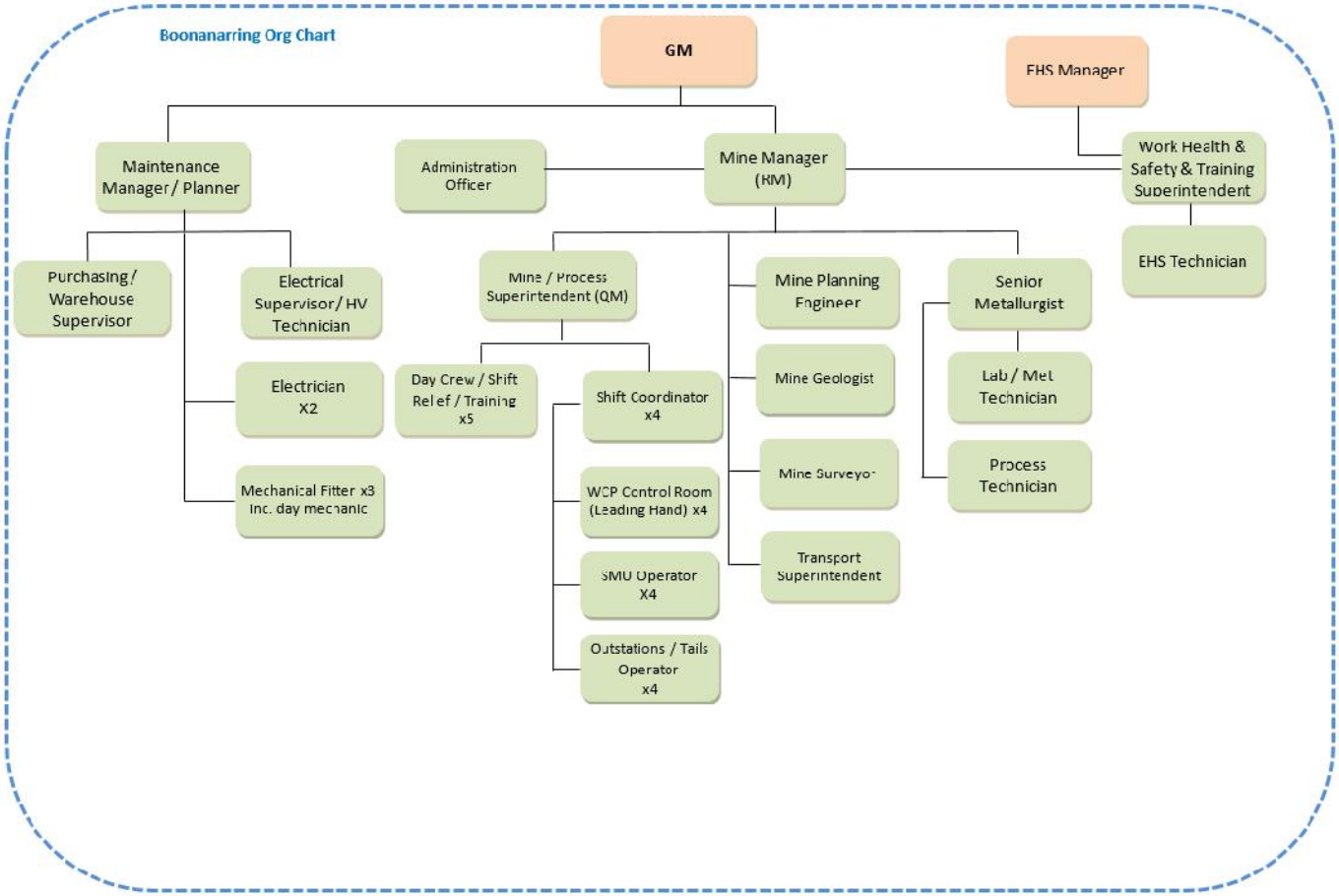
Professional and technical skills required on an irregular basis will be provided by consultants based out of Perth and surrounding areas.

The preferred employment model uses individual employment agreements between individual workers and the Company. This will depend on prevailing HR/IR regulations and general practice.

The operating workforce will be progressively recruited during the construction period and will participate in the mine development, assembly of plant and equipment, commissioning and administration services. This will have the advantage of providing opportunities for key personnel to become familiar with the plant and to start to 'take ownership' ahead of commissioning.

Figure 1.22 illustrates the proposed Boonanarring organisation chart for plant operational personnel working across four areas.

Figure 1.22 Proposed Boonanarring Organisation Chart



1.17 Health, Safety, Environment, Permitting and Community

The Boonanarring deposit is in the Shire of Gingin, a predominantly rural area with a population in the order of 5,250 residents. Gingin is the main town and administrative centre, located approximately 20 km south of the deposit. The site is on cleared agricultural land, used for broad scale cropping and grazing. Intensive horticulture (turf farms and vegetable growing) exist to the south and several commercial tree plantations of mixed success also occur within the area. The resources are in an established mineral sands province with a history of development exceeding 30 years and are secured through tenure granted under the Western Australian (WA) Mining Act 1978, which includes several mining leases at Boonanarring.

Whilst the Boonanarring operation will be new, the local community is familiar with the characteristics of mineral sands mining, processing and product transport, with Iluka Resources operating the Gingin mine (approximately 10 km south of Boonanarring) from 2005 - 2009. Further north, mineral sands have been mined for many years with large scale operations based at Cooljarloo and Eneabba. Impact on social issues have been demonstrated to be adequately managed in the context of the Gingin area by these successful operations. Stakeholder consultation conducted to-date has identified that many stakeholders are supportive of Boonanarring as it presents an opportunity for local investment and employment, therefore it is not expected to attract any substantial community opposition.

The safety, flora and fauna, groundwater, noise and other environmental risks associated with the Boonanarring deposit have been assessed and are able to be managed such that the Project can be safely implemented without significant impact to the State's natural heritage and environmental assets.

A strong foundation for the environmental management and community endorsement has been achieved, via the approval process undertaken by the Environmental Protection Authority (EPA). The EPA reported in its assessment report that all impacts could be managed by implementing management actions, complying with conditions and obtaining and complying with appropriate secondary approvals.

Obtaining all remaining safety and environmental approvals, is well advanced, with key approvals being recently submitted or in the final stages of preparation.

Land assess is covered by several compensation agreements with landholders which are required to facilitate mining. In some instances, these agreements will build on existing exploration phase agreements. Appropriate tenure under the Mining Act 1978 is required. Most of the deposit is covered by two granted Mining Leases (M70/1194 and M70/1311) and the balance is held under an exploration licence (E70/3041) and a General Purpose Lease G70/250. Application for a third

mining lease covering the south end of the planned mining area may be made later if required. The deposit is on freehold land where Native Title has been extinguished and so proposals related to the land do not attract any procedural rights under the Native Title Act 1993. Consequently, the grant of Mining Lease tenure by DMP did not trigger the 'future act' provisions of the Native Title Act 1993 for the Boonanarring project.

1.18 Financial Analysis

The BFS has demonstrated a relatively low capital cost with significant returns and rapid payback on capital based on independent third party pricing assumptions.

Project economics are based on an initial 5 year mine life at Boonanarring followed by a move to Atlas adding an additional 3 years to overall mine life in the detailed financial model.

It is noted that potential exists to expand mine life or increase production through one or more of the following:

- Extension to the Boonanarring reserves/resources to the north and/or south of the planned mine
- Processing of low grade material during the current Boonanarring mine life
- Extensions to the Atlas Resources/ Reserves
- Other high grade resources in the Image portfolio of assets.

Given the current relatively short project life, extensions at Boonanarring, Atlas or the development of other resources is likely to have a significant positive impact on overall project economics.

The potential cashflows, and hence financing for the project, is underpinned by a Life-of-Mine offtake agreement for all HMC processed.

Key Highlights for the Project are:

- Pre-Tax NPV of A$135 M at an 8% discount rate
- IRR of over 64% pre-tax and EBITDA of A$266 million (Table 1.25)
- Rapid payback of capital post production estimated at 22 months
- Boonanarring Initial Development Capital, including contingency and resalable land, estimated at A$51.7 million

Table 1.25 Atlas: Project Net Revenues, Operating Costs and EBITDA

A$M, Real 2017 Prices	Boonanarring	Atlas	Project
Revenue	553	240	793
Royalties	(26)	(11)	(37)
Net Revenue	527	229	756
Operating Costs	(336)	(154)	(490)
EBITDA	**191**	**75**	**266**

Figure 1.23 demonstrates the sensitivity of the Project to various inputs. The Project is relatively sensitive to movements in commodity prices and in particularly zircon as 60-70% of revenue is expected to be generated from zircon. The Project is also quite sensitive to a move the in the A$:US$ exchange rate given that the HMC is likely to be priced in US$ whereas most the capital and operating costs expenditure will be denominated in A$.

Other areas of sensitivity are overall grade, recovery to product, and operating costs.

Full Project funding is expected to be secured during the third quarter of 2017 with production commencing in March 2018. On this basis, projected cashflows are as shown in Figure 1.24. The payback period for Boonanarring is estimated at 22 months.

Figure 1.23 Project Sensitivity Analysis

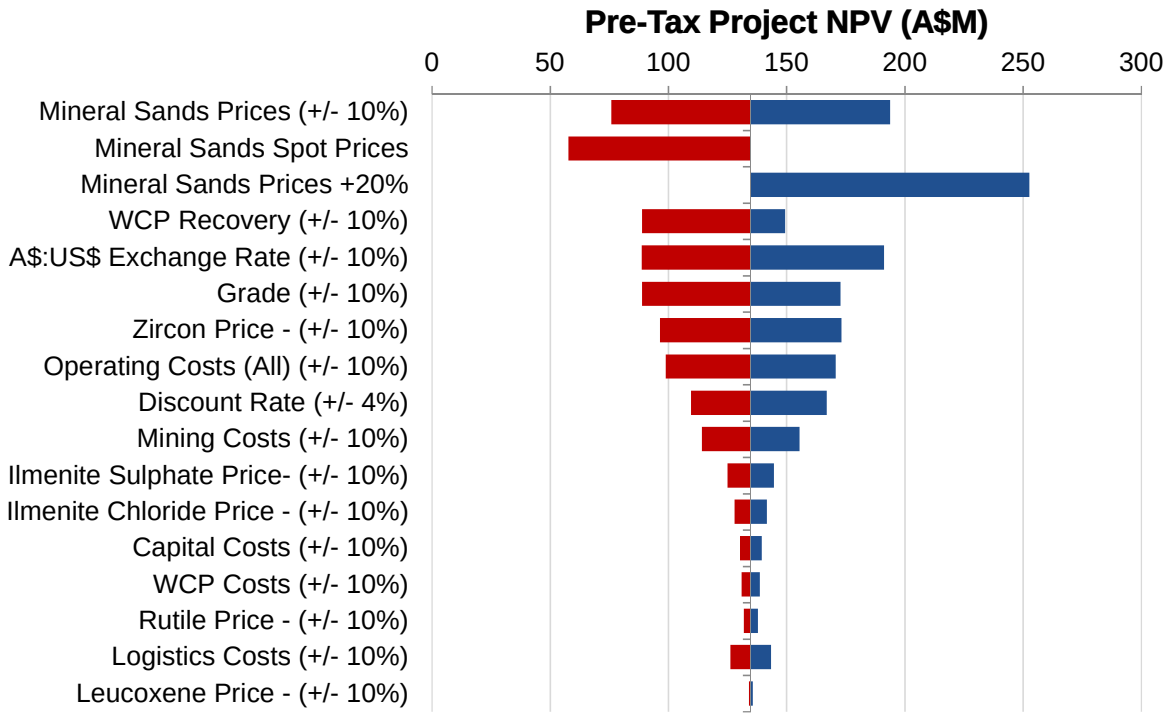
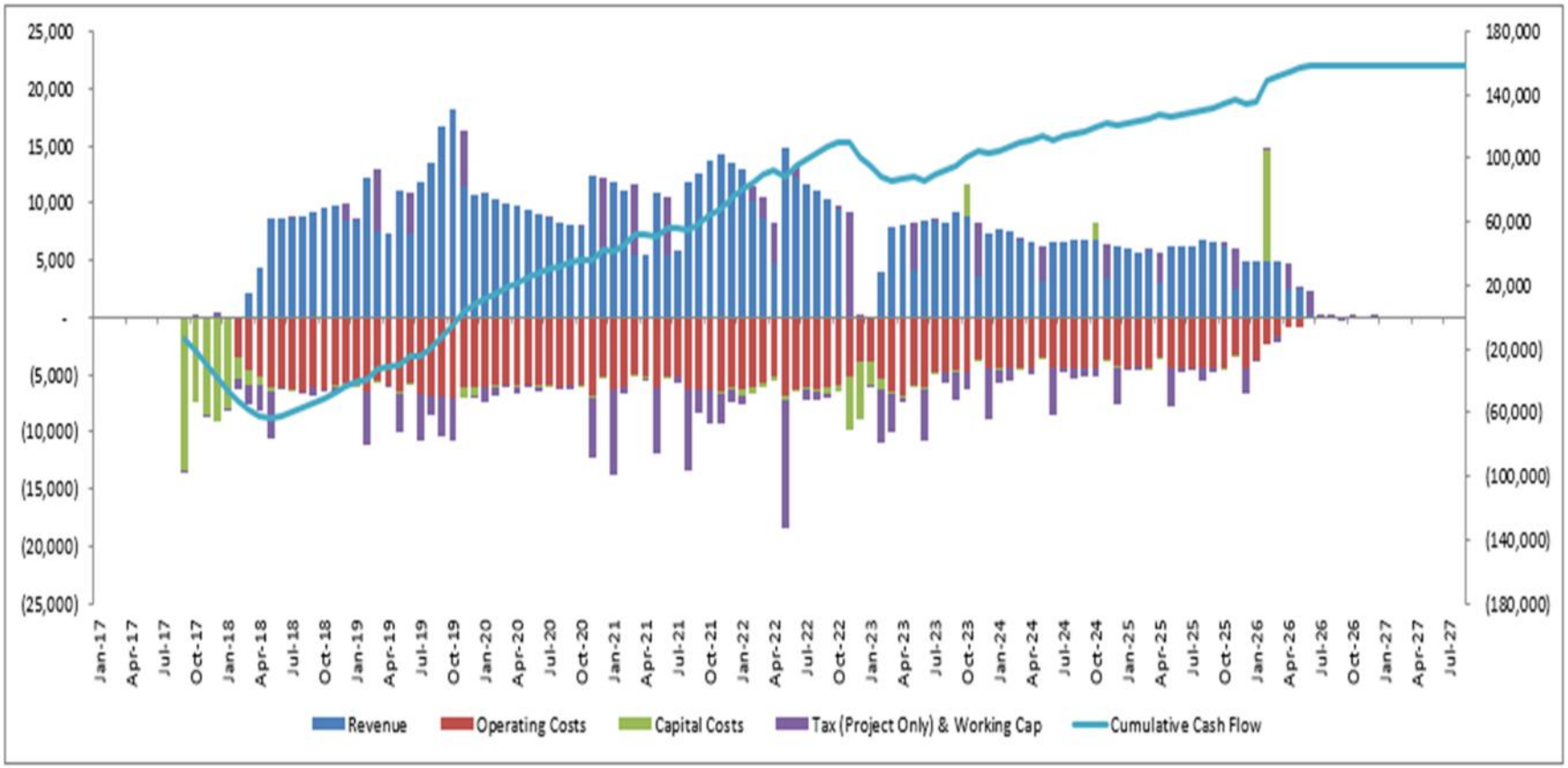


Figure 1.24 Monthly Project Cashflows



1.19 Risk Assessment

A formal risk assessment was undertaken on Boonanarring. Figure 1.25 shows the risks in their positions on the risk matrix. The risk matrix contains five high priority risks that need to be managed. These risks reflect the current stage of development of Image and the Project, as well as specific risks associated with the mineral sands market and funding in general.

Specific high priority risks relate to Project funding, cashflow considerations and the associated implementation schedule, commodity pricing and HMC off-taker obligations.

Management attention risks (second level risks) relate to a number of Project aspects including funding the project, potential cashflow issues before full funding, owners team capacity to manage the project implementation, delays to the completion of the BFS, general permitting and regulatory issues, achieving sales and offtake agreements, potential capital cost overruns, management of noise on site and risks associated with travel to/from site.

Treatment strategies have been developed for each of these priority and management attention risks. These risks all need to be managed as the Project develops.

The results of this risk assessment will form the basis of a risk register that will need to be maintained and regularly reviewed against risk treatment strategies adopted on an ongoing basis, as the Project continues to be developed and moves into production.

No formal risk assessment was performed for Atlas mine and it has been assumed the risks and risk profile will be similar given the mining and processing are similar. The location may impose higher environmental risks which will be addressed during the Atlas BFS.

Figure 1.25 Boonanarring Risk Matrix

Likelihood	Low	Minor	Moderate	Major	Critical
Almost Certain					
Likely	Operational Details		Pre Cashflow Finance & Transition Delays to BFS - Image's Resourcing Relationship with Landowners Noise	Working capital cashflow at start-up Implementation Schedule	
Moderate		Mining Contractor Performance Environmental Impacts from Mining Extreme Weather Impacts Water Demand on Site	Gaps in BFS Public Road Impacts Loss of Key Person Performance of SMU Tailings Performance Final Product Specification	Owners Costs Long Lead Items Capital Cost Over-run - Engineering Operating Cost Estimate Land Access	Capacity to Fund the Project Commodity Prices & FX HMC Off-taker Obligations
Unlikely	Mine Scheduling	Hydrology & Geotech Fire Impact on Boonanarring Environmental Management Personnel for Operation	Loan Securities Murray Zircon Image Shareholder Approvals Resource Definition Ore Variability Acid Sulphate Soils Mine Closure Water Allocation Exceeded Power Demand	Finalising Contracts Market Offtakes Ground Water Drawdowns Delays to BFS - Land Acquisition Pre Cashflow Finance & Transition	Approvals & Permits Issues Affecting OZC Road Incident Offsite
Rare		Fire Risk - Image Triggers		Insurance	Damage to External Infrastructure
Legend	Low		Medium	Management Action	Priority Action

1.19.1 Priority Action Risks Treatment Strategies

Capacity to Fund the Project

The risk is that the Project is unable to secure funding.

Treatment strategies identified are:

- Options for different debt/equity ratios and structuring
- Alternative debt sources
- Adapting to changing market conditions in a timely manner

Working Capital Cashflow at Start-up

The risk is that Image will run short of cash flow from site establishment through to positive cashflow.

Treatment strategies identified are:

- Develop additional cash flow options/contingency sources
- Identify an alternative finance line if necessary
- Strategy to possibly approach shareholders
- Detailed planning & implementation schedule.

Implementation Schedule

The risk is that the implementation will take longer than projected in the BFS schedule.

Treatment strategies identified are:

- Peer review
- Ongoing review of implementation schedule
- Early works program/early funding
- Manage post-BFS optimisation
- Manage change so minimise impact on schedule
- Isolate changes as separate projects.

Commodity Prices and FX

The risk is that commodity price fluctuations and exchange rate variations will reduce revenue compared to financial model projections.

Treatment strategies identified are:

- Cost control to maintain low cost producer status
- Consider on-site magnetics/non-magnetics separation strategy
- Consider hedging of part of A$:US$ Foreign Exchange exposure.

HMC Offtaker Fails to Meet Obligations

The risk is that the HMC offtaker fails to meet its obligations under the HMC Offtake Agreement, and in particular, to provide letters of credit on a timeous basis as required.

Treatment strategies identified are:

- Pre-arrange alternate HMC sale mechanisms with another off-taker
- Seek alternate buyer on a per shipment basis
- TZMI to act as arbitrator for pricing discrepancies
- Maintaining the strong long term relationship that OZC/Murray Zircon Pty Ltd have built with the off-taker.

1.20 Implementation and Operating Plan

The objectives and implementation methodology for the early works program and Project execution includes the following:

- Define the scopes of work for major project contracts – EPC/EPCM, mining, logistics, external intersection upgrades, energy supply
- Assemble an Owner's and EPCM team, with a sub team to perform the NPI works.
- Establish Project framework and procedures.
- Define the scope of the work for the earthworks with new geotechnical data.
- Define the scope of the work for the electrical works for the initial HV submission and subsequent design works to order long lead items and installation contracts.
- Define the scope of the work for the concrete works and installation contracts.
- Define the scope of the work for the SMP works and installation contracts.
- Define the scope of the work for the E&I works and installation contracts.

Image has adopted a seamless approach to its study stages that accommodates change through the BFS and into the early works and implementation phase. Under this scenario, the BFS will generally still accommodate some minor changes, and the transition from BFS to implementation will require some work to close any gaps in scope. This form of fast tracking project development

reduces the development schedule, but pushes out more Project risk that is mitigated during project execution.

This type of development is driven by:

- Uncertainty around product markets and the need to drive the Project development and complete the product marketing at the same time
- A challenging fund raising environment where it is necessary to provide constant project updates to the marketplace and to reach milestones both quickly and efficiently
- A short ramp up to full production
- An owners' appetite to accept more risk in return for a shorter schedule and more market-driven flexibility. (Note that risk in this context does not imply potential fatal project flaws, but that there may be issues that will need to be solved as the Project proceeds – perhaps with a cost imposition).

A key will be the process design, so that the final design of the process plant will be based on the product requirements, which will satisfy the market. The BFS has resolved the process design and therefore facilitates transition to early works and execution can be anticipated.

Planning and scheduling, and progress against plan, will be an integral part of the on-going transition from BFS - Early Works - Execution phase. The plan will be maintained by the Project Manager.

The Project implementation plan will be updated during the early works, once all long lead items are procured, to provide certainty of strategy and design while ensuring that the project is delivered to schedule and the ramp up to full production is achieved in an efficient and productive timeframe.

The Project schedule from completion of the BFS to completion of construction completion is 9 months. The major influences on the projected schedule are:

- Completion of funding activities post BFS and again prior to the commencement of detailed design and early works
- Front end engineering design (FEED) and early detailed design activities
- Procurement of long lead items
- The ability for selected contractors to achieve the scheduled delivery time frames
- Future detailed scheduling to determine the optimum number of work fronts and work crews assigned to the mechanical, piping and electrical installations
- Duration of commissioning and ramp up which is three months on top of completion of construction

- Overburden removal prior to attaining access to the ore
- Assumption, forming the basis of the implementation schedule, that the BFS and ideally FEED have been completed prior to the award of an EPC contract
- Environmental and mine permitting are excluded from the schedule
- The fast tracked timeline is subject to early and full financing.

Image has considered contract operation as well as Owner-operator management of the Project. The mining operation and toll processing will be contractor operated, with all other activities Owner-operated but this will be further considered during post BFS.

1.21 Further Work

No further study work is planned to support the Boonanarring BFS, except for incorporating results from ore definition drilling/grade control drilling completed in March 2017 in the Resource model to upgrade Resources in the first 2-3 years to Measured for conversion to Proved Reserves (highest level of knowledge and confidence). The Atlas BFS is scheduled to commence in 2020.

Engagement with long lead equipment suppliers, mining contractors, logistics companies, electrical suppliers and Western Power for the high voltage submission needs to continue.

Permitting and government approvals process need to continue.

1.22 Opportunities

The following opportunities will be considered during the detailed design and implementation stages of the project (refer to Table 1.26):

Table 1.26 Project Opportunities

Opportunity	Impact	Comment
Refurbished and/or second hand plant and equipment	Reduced Capital cost	Review and optimise equipment selection during details design stage
Processing Overlying ore	Reduced strip ratio, increases HMC tonnage	Review and control blending based on grade during mining
Dry milling of HMC	Reduced transport, improved revenue, increased process cost	Review once plant is operational
Extension of Boonanarring Resource/Reserves and Atlas/Hyperion	Increased HMC tonnage	Ongoing exploration activities
Tailings Co-disposal	Reduced costs and disturbance area	Undertake testwork to enable transition to sand and slimes tailings co-disposal