

DEVELOPMENT FINANCIAL

# Fortress Minerals Ltd. (FMIL SP/ OAJ.SI)

# **Huge Future Potential**

Tang Kai Jie/ 65 6202 1192/ kaijie.tang@kgi.com

- Abundant Iron Ore Resources and Reserves. Fortress
   Mineral has crafted a solid foundation within the industry
   within the Southeast Asia region, with 2 current big projects
   at hand to drive revenue. Their mines at Bukit Besi and
   Mengapur make up a total of 1477.88ha of available mining
   and exploration land, an indicated and inferred iron
   resource of 8.83 MT, as well as an indicated and inferred
   copper resource of 35.89 MT.
- **Potential to upscale.** The company also announced 2 new projects in the state of Sabah, East Malaysia. This adds an additional exploration land of 44,000ha for the company, as well as 4 new key minerals to drive revenue in the future.
- **Diversification of products.** Fortress Minerals' 2 new projects expose the company to new minerals in their portfolio, namely, Nickel, Cobalt, Zinc, and Galena, alongside the existing iron and copper. This adds the potential for new revenue drivers for the company in the long term. Fortress Minerals has plans to begin its sales of copper within 2 to 3 years as well, aside from its current sales of iron ore.
- We initiate with an Outperform recommendation and a target price (TP) of \$\$0.46.

Financials & Key Operating Sta	tistics				
YE Feb (US\$ m)	2022	2023	2024F	2025F	2026F
Revenue	43.4	53.5	69.7	71.4	72.5
PATMI	13.9	12.6	21.6	22.1	22.6
EPS (cents)	2.8	2.4	4.1	4.2	4.3
EPS growth (%)	-23.9%	-13.3%	71.3%	2.6%	1.9%
DPS (Sing cents)	1.0	0.8	1.0	1.0	1.3
Div Yield (Y%)	2.9%	2.4%	3.1%	3.1%	3.8%
Net Profit Margin (%)	32.0%	23.5%	31.0%	31.0%	31.1%
Net Debt/ (Net Cash) Gearing (%)	31.2%	15.7%	2.8%	(2.4%)	(10.1%)
ROA (%)	15.1%	13.4%	20.7%	19.3%	17.5%
ROE (%)	24.4%	20.0%	27.3%	23.1%	20.2%

Source: KGI Research

Fortress Minerals Limited mines, processes, and distributes iron ore. The Company focuses on the exploration, mining, production, and distribution of iron ore concentrates. Fortress Minerals' key markets lie mainly in Malaysia, alongside China, and Vietnam. The company plans to diversify into other minerals that are used largely for clean energy. This diversification strategy adds a layer of protection to the volatility of commodity prices.

Outperform - Initiation			
Price as of 29 May 23 (SGD)	0.34	Performance (Absolute	e)
12MTP (\$)	0.46	1 Month (%)	-12.8
Previous TP (\$)	-	3 Month (%)	-15.0
Upside, incl div (%)	37.8%	12 Month (%)	-22.7
Trading data		Perf. vs STI Index (Red)	
Mkt Cap (\$mn)	178.0		;
Issued Shares (mn)	523.0		MANUAL
Vol - 3M Daily avg (mn)	0.1	80 Herry Market Market	- N
Val - 3M Daily avg (\$mn)	0.0		
Free Float (%)	18.10%	30	
Major Shareholders		Previous Recommenda	ations
Y F Chee Holdings	41.4%		
SDB Mining Sdn Bhd	29.6%		
Greger International	7.0%		

**Low gearing ratio.** The company operates with a low gearing ratio, with little debt on hand. The company plans to use its cash flow from its current projects to fund its expansion plan in the state of Sabah, East Malaysia.

A steady source of supply. With secured assets in Bukit Besi and Mengapur, Fortress Mineral can expect a steady flow of iron ore to drive revenue growth. This growth is exponential as the mine has yet to reach its full potential and lifespan, with only 15% of Bukit Besi mine being explored, and only the top layer of soil in Mengapur has been explored. This presents Fortress Mineral with a strong supply of iron ore, as well as copper ore in the long term.

Valuation & Action: We initiate with an Outperform recommendation and a TP of S\$0.46, based on a blended valuation, using Discounted Cash Flow (DCF), with a terminal growth rate of 2% and a WACC of 10%, as well as a comparable multiples Valuation using an industry EV/Resource multiple of 3.6x. Fortress Minerals' strong balance sheet, low gearing ratio, and ability to generate cash flow to fund its future expansion plans put it at a competitive advantage against its competitors. We arrive at a TP at \$0.46 with a 34.9% upside as we highlight the company's short-term growth strategies and emphasize the long-term potential growth upside that the company would be able to benefit from.

**Risks:** The direction of iron ore is the biggest driving factor of profits. Local Demand for Iron ore in Malaysia remains the largest variable. With Malaysia slowly emerging from the COVID-19 pandemic, demand for iron ore is likely to increase as construction activity resumes.



# **Contents**

Business at a Glance	3
Investment Thesis	4
Abundant Iron Ore Resources and Reserves	4
Potential to upscale	5
Diversification of products	5
Financial Analysis & Valuations	6
FY2023 Results	6
Peer comparison	7
Balance Sheet	7
Valuations	8
Macro Outlook	10
Rising Global Uncertainties	10
Pressures from a high interest and inflation rate environment	10
Industry and Market Outlook	11
Growth in Global Iron Ore demand	11
Outlook of the Iron Ore/ Steel market	11
Demand for Iron Ore in Malaysia	11
Company Outlook and Future Plans	12
Ramping up production at current mines	12
Expansion Plans with new prospecting license	12
Environmental, Social, & Governance (ESG)	12
Moving to renewables	12
Greater focus on new energy minerals	12
Key Risks	13
Financial Summary	14
Appendix A	15
Appendix B	16
Annendix C	17



#### **Business at a Glance**

Fortress Minerals Limited mines, processes, and distributes iron ore. The Company focuses on the exploration, mining, production, and distribution of iron ore concentrates. The company serves customers mainly in Malaysia, as well as China, and Vietnam.

The company's revenue driver is mainly derived from the sales of iron ore concentrates to local Malaysian steel mills, which are located at a strategic location not too far from Fortress Minerals' mines. The company is constantly ramping up its exploration and drilling efforts to ensure that there is a steady supply of the iron ore being processed to be sold to its clients.

The company currently has 2 operational projects on hand, Bukit Besi and Mengapur, covering a total of 1,477.88 hectares of mining & exploration land. The company has a 13 years mining license ending 2033 for its Bukit Besi operations, a 5 years mining license under Cermat Aman subsidiary in project Mengapur, ending 2025, and a 12 years mining license under its Star Destiny subsidiary in project Mengapur, ending 2034, with all of these mining licenses being renewable at the end of its tenure. These 2 operational sites currently focus on mainly the extraction of iron ore, as well as copper ore in the near future.

The company is also engaged in 2 new exploration projects in the state of Sabah, in Bidu-Bidu and Tavai. These new projects hold possibilities for new minerals for the company, namely copper, iron ore, nickel, and cobalt, providing plentiful of growth opportunities for Fortress Minerals.

FORTRESS MINERALS LIMITED

100%
FORTRESS MINING SDN BHD

100%
FORTRESS DREDGING SDN BHD

100%
FORTRESS RESOURCES PTE LTD

100%
FORTRESS RESOURCES PTE LTD

100%
FORTRESS METALS SDN BHD

100%
STAR DESTINY SDN BHD

100%
STAR DESTINY SDN BHD

100%
STAR DESTINY SDN BHD

Figure 1: Fortress Minerals' Corporate Structure.

Source: Company

80% FORTRESS DRILLTECH SDN BHD

# Incorporated after financial year ended \* Acquisition completed on 7 April 2021.

Table 1: Summary of Bukit Besi and Mengapur Resources

Resources (mn tonnes)	Buki	t Besi		Mengapur					
	Iron	Ore	Iror	Ore	Сорр	Copper Ore			
	Tonnes (Mt)	Grade (Fe %)	Tonnes (Mt)	Grade (Fe %)	Tonnes (Mt)	Grade (Cu %)			
Measured	-	-	-	-	-	-			
Indicated	0.57	44.03%	0.34	28.01%	21.00	21.03%			
Inferred	6.13	44.17%	1.76	30.75%	14.89	25.60%			
Total	6.73	44.16%	2.1	30.30%	35.89	22.93%			

Note: The company does not report any ore reserves or mineral reserves, in accordance with the JORC Code (2012) guidelines at both the Bukit Besi and Mengapur Project. Mineral Resources that are not Ore Reserves or Mineral Reserves do not have demonstrated economic viability.

Source: Company, KGI Research

Table 2: Summary of Fortress Minerals' Current Projects

Projects Area	Mining & Exploration Land (Hectares)	Mineral Type	Inferred + Indicated Mineral Resources (Million Tonnes)	Grading	License Period
Bukit Besi	526.2	Iron	6.73	44.16%	2020 to 2033
Moganur	Cermat Aman: 185.1		2.10	30.30%	CASB: May 2020 - May 2025
Megapur	Star Destiny: 766.58	Copper	35.89	22.93%	SDSB: May 2022 - May 2034

Note: The company does not report any ore reserves or mineral reserves, in accordance with the JORC Code (2012) guidelines at both the Bukit Besi and Mengapur Project. Mineral Resources that are not Ore Reserves or Mineral Reserves do not have demonstrated economic viability.



#### **Investment Thesis**

#### **Abundant Iron Ore Resources and Reserves**

Fortress Minerals' assets are strategic in their mineral resource, location, and infrastructure. Their assets have a long asset life with considerable exploration upside, providing the company with plentiful growth opportunities.

#### **Bukit Besi**

The company holds mining rights for Bukit Besi mine, which are valid up till 2033, and renewable thereafter. To date, about 15% of the surface has been explored at Bukit Besi and the company has been focusing on expanding the width and depth at the West, Valley, and East deposits of the mine. As of 28 Feb 2023, the company has confirmed 6.73 million tonnes of inferred and indicated mineral resources. The company balances exploration and mineral resource updates with production as reporting entails greater costs and the mineral resource is visible from the surface.

We predict the estimated remaining life of mine to be at 13.5 years, using the current value of 6.73 million tonnes of inferred and indicated resources, at an extraction rate of 0.5 million tonnes of iron concentrate per year. This estimated remaining life of mine is greater than the company's remaining mining rights license for Bukit Besi.

Bukit Besi mine is also strategically located and supported by good infrastructure, with a mining area of 526.2ha. The mine also provides mobility convenience with the location being just 1.5 hours away from Malaysia's regional Sultan Mahmud Airport, and 86 km from Bukit Besi Kemaman Port, providing seamless transportation flows with the ease of access to key

highways. This has allowed Fortress Minerals to be able to conduct daily trucking activities to deliver iron ore concentrate to their customers' stockyard.

#### Mengapur

Mining rights at Mengapur are up till 2025 for Cermat Aman (CASB) and up till 2034 for Star Destiny (SDSB), both of which are renewable. To date, the company has only processed the top layer of soil at CASB mine. As of 28 Feb 2023, the company has confirmed a total of 2.1 million tonnes of inferred and indicated iron ore resources at Mengapur. The company also confirms 35.89 million tonnes of inferred and indicated copper resources at Mengapur.

Mengapur projects cover an available mining area of 951.68ha, with is 77.7% larger than the mining area available at Bukit Besi mine. The CASB and SDSB mines also provide ease of access to key highways, and are just 85km away from Kuantan port, providing the company with a seamless transportation flow. This helps to shorten the delivery lead time between Fortress Minerals and its clients.

The company is still in the midst of ramping up its extraction capabilities at Mengapur. Given the larger amount of inferred and indicated resources available at Mengapur mine, the estimated remaining life of mind would definitely extend beyond the remaining period for the mining rights for Mengapur.

Table 3: Bukit Besi's Resources

	JORC Cat	Area	Mineral Type	Net Attributa	able to Fortress	Change from previous
	JORC Cat	Alea	iviillerai Type	Tonnes (Mt)	Grade (Fe %)	update (%)
		West	Iron	0.42	46.42%	93.2
	Indicated	East	Iron	0.16	37.60%	NA
		Sub-total	Iron	0.57	44.03%	151.5
Bukit Besi		West	Iron	0.88	44.55%	-15.4
	Inferred	Valley	Iron	4.62	45.25%	24.0
	illielleu	East	Iron	0.66	36.16%	17.8
		Sub-total	Iron	6.13	44.17%	15.7
	Indicated	Total	Iron	6.73	44.16%	21.3
	+ Inferred	iotai	iron	0.73	44.10%	21.3

Note: The company does not report any ore reserves or mineral reserves, in accordance with the JORC Code (2012) guidelines at both the Bukit Besi and Mengapur Project. Mineral Resources that are not Ore Reserves or Mineral Reserves do not have demonstrated economic viability.



Table 4: Mengapur's Resources

	JORC Cat	Cut-off Grade	Mineralisation	Net attributa	ble to Fortress	Grade Cu (%)	Grade Au g/t	Grade Ag g/t	Grade S (%)	Change from
	JUNC Cat	Cut-on Grade	Milleralisation	Tonnes (Mt)	Grade Fe (%)	Grade Cu (%)	Grade Aug/t	Grade Ag g/t	Grade 3 (%)	previous updates (%)
			Skarn Cu	20.30	20.76%	0.41%	0.12	7.26	4.60%	
		0.3% Cu	Pyrrohotite Cu	0.70	29.11%	0.55%	0.28	3.48	14.14%	
	Indicated		Sub-Total	21.00	21.03%	0.42%	0.13	7.13	4.92%	No Indicated
	muicateu		Skarn Magnetite	0.34	27.66%	0.13%	0.09	1.52	6.23%	previously reported
		25% Fe	Breccia Magnetite	0.01	46.28%	0.21%	0.23	5.66	0.13%	
Mengapur			Sub-Total	0.34	28.01%	0.13%	0.09	1.60	6.12%	
Wieligapui			Skarn Cu	7.93	22.39%	0.41%	0.13	8.42	4.62%	-8.00%
			Pyrrohotite Cu	6.96	29.26%	0.60%	0.27	3.56	13.75%	13.00%
	Inferred		Sub-Total	14.89	25.60%	0.50%	0.19	6.15	8.89%	0.00%
	illielleu		Skarn Magnetite	1.38	27.80%	0.13%	0.12	1.35	5.89%	-74.00%
		25% Fe	Breccia Magnetite	0.38	41.51%	0.20%	0.17	6.04	0.19%	-93.00%
			Sub-Total	1.76	30.75%	0.14%	0.13	2.36	4.67%	-84.00%
	Total	0.3% Cu	Total Cu	35.89	22.93%	0.45%	0.16	6.72	6.56%	143.00%
	iotai	25% Fe	Total Magnetite	2.10	30.30%	0.14%	0.13	2.24	4.90%	-80.00%

Note: The company does not report any ore reserves or mineral reserves, in accordance with the JORC Code (2012) guidelines at both the Bukit Besi and Mengapur Project. Mineral Resources that are not Ore Reserves or Mineral Reserves do not have demonstrated economic viability.

Source: Company, KGI Research

# Potential to upscale

The company also recently announced 2 new projects in the state of Sabah, East Malaysia. The company was issued 2 new prospecting licenses by the Land and Surveys Department in Bidu-Bidu and Tavai respectively. This presents Fortress Minerals with a 2-year period for prospecting at both concession areas, with the license being renewable. From these 2 projects, the company looks to be able to process 4 key minerals: Iron ore, Copper, Nickel, and Cobalt.

The company has layout an indicative timetable with 4 phases to prospect these areas in Bidu-Bidu and Tavai respectively, consisting of 1. Geological Mapping, Geochem, and Geophysical Survey, 2. Drill Target Reporting, 3. Drilling, and 4. Mineral Resource Estimates ("MRE") Reporting. This would bring about estimated total costs of US\$3.45 million for Tavai's project, and US\$3.30 million for Bidu-Bidu's projects. These costs will be funded mainly using internal resources and will not incur any additional debt.

These 2 licenses presents Fortress Minerals the opportunity to be able to prospect an area of 4,000ha and 40,000ha at Bidu-Bidu and Tavai respectively. This potentially provides the company with an additional 3000% of land space to generate more revenue streams for the company coming from the extraction of 4 new key minerals, alongside Iron Ore and Copper.

**Table 5: Fortress Minerals' Future Projects** 

Projects Area	State	Company Name	Shareholders	License Period	License Location	Type of Minerals	Estimated Financial Commitment
Bidu-Bidu, Beluran	Sabah, East Malaysia	Saga Mineral Sdn. Bhd.	Fortress Cu Sdn . Bhd . (65%), Aston Solutions Sdn . Bhd . (35%)	15 December 2022 to 14 December 2024	40km² at Hutan Simpan Bidu Bidu , Telupid , Sabah, Malaysia	Volcanic Massive Sulphide (Copper), Iron Ore, Lateritic Nickel, Zinc and Galena	RM14,780,000
Tavai, Tongod	Sabah, East Malaysia	Kencana Primary Sdn. Bhd.	Fortress Ni Sdn. Bhd. (51%), Majestic Islands Sdn . Bhd. (35%), Ophir Metal Sdn. Bhd. (14%)	19 December 2022 to 18 December 2024	400km² at Hutan Simpan Pinangah & Tangkulap , Tongod , Sabah, Malaysia	Nickel, Copper, Cobalt	RM15,460,000

Source: Company, KGI Research

# **Diversification of products**

Being a producer of iron ore concentrates, Fortress Minerals has always placed a key focus mainly on high-grade iron ore concentrates, with the exception of lower-grade iron ore that is occasionally requested by their customers. With low-grade iron ore but more and more out of business, the company's focus on high-grade iron ore has tide the company through many tough times due to the demand for iron ore as well as the fluctuation of iron ore prices.

To date, Fortress Minerals has solely been a miner and producer of iron ore concentrates. The recent acquisition of Fortress Mengapur in FY2022 confirms 35.89 million tonnes of inferred copper resources at Mengapur mines (as of 28 February 2023), and the most recent prospecting license in Sabah also sees the company uncovering copper as one of its key minerals. The company is intending to process these copper resources and start the sale of copper ore within 2 to 3 years. Aside from copper, the company also confirms other



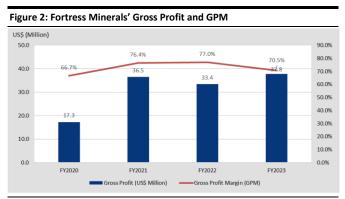
minerals such as Gold and Silver within the Mengapur projects, and Zinc, Galena, Nickel, and Cobalt from the 2 new prospecting areas at Bidu-Bidu and Tavai.

In the long term, this diversification of products would allow the company to provide itself with more revenue drivers to drive growth for the company, at the same time reducing its exposure to commodity price risk due to the large volatility of commodities prices. Furthermore, minerals such as Nickel and Cobalt are key minerals that are becoming increasingly critical with the rise in demand for Electric Vehicles. This additional basket of resources positions Fortress Minerals well to drive revenue growth for the company in the future.

# **Financial Analysis & Valuations**

#### FY2023 Results

The company reported stronger FY2023 results on higher revenues and sales volumes. Revenue rose by 23.5% YoY to US\$53.5 million, compared to US\$43.4 million in revenue in FY2022. Sales volume rose 52.8% to 546,000 DMT in FY2023 compared to 357,000 DMT in FY2022 as production capabilities are normalized.



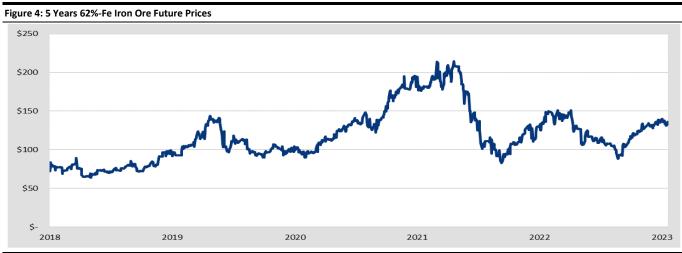
DMT (Thousands) 600.0 546.1 500.0 452.8 400.0 357.4 300.0 269.6 200.0 100.0 0.0 FY2020 FY2021 FY2022 FY2023

Source: Company, KGI Research

Source: Company, KGI Research

Figure 3: Fortress Minerals' Sales Volume

Fortress Minerals' FY2023 Gross Profit Margin (GPM) and Net Profit Margin (NPM) fell YoY, mainly attributable to the lower iron ore price in FY2023 compared to a higher iron ore price in FY2022 (Fig. 4), as well as higher inflation of production cost, offset a little by the higher sales volume in FY2023, leading to an increase in the company's Gross Profit. The company's sales volume still grew YoY, displaying a strong operational resilience and growth in the company business, with room for more growth given the company's current assets.



Source: Bloomberg, KGI Research



# **Peer comparison**

Table 6: Fortress Mineral's Peer Comparison - Key Ratios

Company Name	Region Last Price		Market Can		Dividend Yield (%)  Net Gearing		P/E (x)		P/B	(x)	Gross Profit	Net Profit	ROA (%)	ROE (%)
		(local \$)	(US\$ m)	FY22	FY23F	• • •	12M	Forward	Historical	Forward	margin (%)	Margin (%)		` '
Singapore														
FORTRESS MINERALS LTD	Singapore	SGD 0.34	132	0.0	-	15.7	10.0	-	2.4	-	70.5%	23.5%	13.4%	20.0%
SOUTHERN ALLIANCE MINING LTD	Singapore	SGD 0.69	249	0.1	-	-58.6	-	-	2.9	-	15.7%	9.1%	3.9%	-
Asia														
NMDC LTD	India	INR 107.40	3,810	5.9	7.6	-29.5	5.6	5.8	1.4	1.3	98.1%	36.2%	22.9%	28.9%
SANDUR MANGANESE & IRON ORE	India	INR 1194.00	390	-	-	-5.3	11.8	-	-	-	-	20.9%	9.7%	-
INNER MONGOLIA DAZHONG MIN-A	China	CNY 11.56	2,466	2.3	3.7	34.0	17.8	10.1	3.1	2.7	45.2%	24.1%	10.1%	17.4%
Rest of the World														
FORTESCUE METALS GROUP LTD	Australia	AUD 19.86	40,015	11.9	10.0	5.1	6.9	7.0	2.2	2.1	56.0%	35.6%	21.8%	35.3%
BHP GROUP LTD-SPON ADR	Australia	USD 56.67	143,540	-	7.2	-1.7	-	9.6	-	3.2	50.3%	47.5%	30.3%	64.2%
RIO TINTO LTD	Australia	AUD 109.10	102,641	6.2	6.6	8.3	9.3	9.2	2.6	2.1	-	22.4%	12.4%	24.4%
ANGLO AMERICAN PLC	UK	GBP 2318.50	38,324	5.1	5.8	17.4	7.7	7.1	1.7	1.2	-	12.9%	6.8%	16.4%
VALE SA	US	USD 13.26	58,874	-	11.0	21.2	-	4.9	-	1.5	45.2%	42.4%	20.1%	50.6%

Source: KGI Research

#### **Balance Sheet**

The company has a very healthy balance sheet with a strong cash position, allowing the company to fund its 2 new latest projects in the state of Sabah, East Malaysia. The company also has a low debt position with low gearing. The recent interest rate hikes would not impact the company's debt significantly.

Table 7: Fortress Minerals' Balance Sheet					
Balance Sheet	2022	2023	2024F	2025F	2026F
Cash and cash equivalents	6.9	5.7	7.5	6.2	13.2
Inventories	3.1	4.7	4.7	4.8	4.8
Trade receivables	1.3	3.9	2.7	2.7	2.8
Other receivables, deposits and prepayments	6.4	4.5	7.1	7.3	7.4
Other current assets	0.0	1.7	1.7	1.7	1.7
Total current assets	17.8	20.5	23.6	22.6	29.8
Property, plant and equipment	68.1	69.5	74.3	84.1	88.7
Other non-current assets	6.1	3.9	6.0	8.2	10.4
Total non-current assets	74.3	73.5	80.3	92.3	99.0
Total assets	92.0	93.9	104.0	114.9	128.9
Trade Payables	1.0	1.3	1.3	1.4	1.4
Other Payables and Accruals	5.0	8.8	8.8	8.8	8.8
Bank Borrowings & Lease Liabilities	8.3	7.8	3.9	_	-
Other current liabilities	0.8	0.1	0.1	0.1	0.1
Total current liabilities	15.0	17.9	14.1	10.2	10.2
Bank Borrowings & Lease Liabilities	16.3	7.8	5.8	3.9	1.9
Other non-current liabilities	3.9	5.3	5.0	5.1	5.1
Total non-current liabilities	20.2	13.1	10.8	9.0	7.1
Total liabilities	35.3	31.0	24.9	19.2	17.3
Share capital	22.5	22.5	22.5	22.5	22.5
Other Reserves	4.2	7.7	7.7	7.7	7.7
Retained Earnings	38.5	48.2	64.3	81.0	96.8
Equity Attributable to owners of the Company	56.8	63.0	79.1	95.7	111.6
Non-Controlling Interest	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Total Equity	56.8	63.0	79.1	95.7	111.5
Total Liabilities and Equity	92.0	93.9	104.0	114.9	128.9

Source: KGI Research



#### **Valuations**

Fortress Mineral's strong balance sheet, low gearing ratio, and ability to generate cash flow to fund its future expansion plans, put it at a competitive advantage against its competitors. We conducted a blended valuation using Discounted Cash Flows (DCF) over a period of 10 years using a Terminal Growth Rate of (2%) and a WACC of 10%, along with a comparable market resource multiple valuation on Fortress Minerals using an industry EV/Resource Multiple of 3.6x to arrive at a projected 12m TP of S\$0.46 with a 34.9% upside.

**Table 8: Production Volume Forecast & Gross Profit** 

		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024F	FY 2025F	FY 2026F	FY 2027F	FY 2028F
12 Months Ending		02/28/2019	02/29/2020	02/28/2021	02/28/2022	02/28/2023	02/28/2024	02/28/2025	02/28/2026	02/28/2027	02/28/2028
Production Volume											
Iron ore Volume (DMT)	Bukit Besi Mengapur	223,859.0	269,615.0	452,756.0	357,556.0	546,076.0	562,458.3 100,000.0	573,707.4 105,000.0	579,444.5 110,250.0	585,239.0 115,762.5	591,091.4 121,550.6
Average Selling Price											
Iron Ore (US\$/ MT)		89.7	95.9	105.4	121.3	98.0	105.2	105.2	105.2	105.2	105.2
Revenue											
Revenue from Bukit Besi (US\$ Revenue from Mengapur (US\$	•	20.1	25.9	47.7	43.4	53.5	59.1 10.5	60.3 11.0	60.9 11.6	61.5 12.2	62.2 12.8
Total Revenue (US\$mn)		20.1	25.9	47.7	43.4	53.5	69.7	71.4	72.5	73.7	74.9
Volume Sold											
Iron Ore Sold (WMT)	Bukit Besi Mengapur	N.I.	300,053.0	497,369.0	392,230.0	598,741.0	616,703.2 100,000.0	629,037.3 105,000.0	635,327.7 110,250.0	641,680.9 115,762.5	648,097.8 121,550.6
Average Unit Cost											
Average Unit Cost (US\$WMT)	Bukit Besi Mengapur	31.0	28.81	22.62	25.46	26.38	26.38 26.38	26.38 26.38	26.38 26.38	26.38 26.38	26.38 26.38
Cost of Sales (US\$mn)		(7.6)	(8.6)	(11.3)	(10.0)	(15.8)	(18.9)	(19.4)	(19.7)	(20.0)	(20.3)
Gross Profit		13.0	17.3	36.5	33.4	37.8	50.8	52.0	52.9	53.7	54.6

Source: Company, KGI Research

**Table 9: Peers' Resources Comparison** 

Company	Currency Adjuste Company Country Enterprise Value ( (USD)		Total Resources Resource Type		2P	Iron Ore Grade (%)	EV/Resource	EV/2P
Singapore								
FORTRESS MINERALS LTD	Singapore	161.5	42.6	Inferred + Indicated	N.A.	45.34/ 33.65	3.8	N.A.
SOUTHERN ALLIANCE MINING LTD	Singapore	254.2	15.9	Inferred + Indicated	N.A.	49.50	16.0	N.A.
Asia								
NMDC LTD	India	3097.7	1,170.0	Inferred + Indicated	N.A.	30.6	2.6	N.A.
SANDUR MANGANESE & IRON ORE	India	352.6	122.0	Not Stated	N.A.	N.A.	2.9	N.A.
INNER MONGOLIA DAZHONG MIN-A	China	2391.3	522.5	Not Stated	N.A.	28.9	4.6	N.A.
Rest of the World								
FORTESCUE METALS GROUP LTD	Australia	43820.3	44,628.0	Inferred + Indicated + Measured	3,118.7	67.3	1.0	14.1
BHP GROUP LTD	Australia	155915.3	101,105.7	Inferred + Indicated + Measured	N.A.	N.A.	1.5	N.A.
RIO TINTO LTD	Australia	111442.6	71,519.3	Inferred + Indicated + Measured	3,449.3	61.5	1.6	32.3
ANGLO AMERICAN PLC	UK	49484.9	337,235.2	Inferred + Indicated + Measured	6,943.6	45.3	0.1	7.1
VALE SA-SP ADR	Brazil	70377.7	28,438.9	Inferred + Indicated + Measured	6,877.6	N.A.	2.5	10.2
Average (Worldwide)							3.6	15.9

Source: Bloomberg, Company, KGI Research



#### Table 10: Free Cash Flow & 12m-TP Calculation

Free Cash Flow Calculation (US\$)	FY 2022	FY 2023	FY 2024F	FY 2025F	FY 2026F	FY 2027F	FY 2028F	FY 2029F	FY 2030F	FY 2031F	FY 2032F	FY 2033F
Free Cash Flow Calculation (033)	02/28/22	02/28/23	02/28/24	02/28/25	02/28/26	02/28/27	02/28/28	02/28/29	02/28/30	02/28/31	02/28/32	02/28/33
Earnings before Income Tax	18.7	17.6	26.0	26.7	27.2	27.7	28.2	28.8	29.3	29.7	30.1	30.4
Add: Interest	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4
	-	-	-	-	-	-	-	-	-	-	-	-
Operating Profit (EBIT)	18.7	17.6	26.0	26.7	27.2	27.8	28.4	29.0	29.6	30.0	30.4	30.9
Less: Tax	(4.8)	(5.0)	(4.4)	(4.5)	(4.6)	(4.7)	(4.8)	(4.9)	(5.0)	(5.0)	(5.1)	(5.2)
Add: Depreciation & Amortisation	4.0	5.3	4.4	4.5	4.6	4.6	4.7	4.8	4.9	4.9	5.0	5.0
Less: Changes in working capital	5.5	1.6	(1.2)	(0.3)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.1)	(0.1)	(0.1)
Less: Capital Expenditures	(15.3)	(8.8)	(11.2)	(16.4)	(11.3)	(11.6)	(11.8)	(12.1)	(12.4)	(12.6)	(12.8)	(13.1)
	-	-	-	-	-	-	-	-	-	-	-	-
FCFF	8.2	10.8	13.5	9.9	15.7	15.9	16.3	16.6	17.0	17.2	17.3	17.5
Terminal Value	-	-	-	-	-	-	-	-	-	-	-	222.9
Total FCFF	8.2	10.8	13.5	9.9	15.7	15.9	16.3	16.6	17.0	17.2	17.3	240.4
Period			0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
Discount Factor			1.0	0.9	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.4
PV FCFF (US\$)			12.9	8.6	12.3	11.4	10.6	9.8	9.1	8.4	7.7	97.2

Valuations			
Discount Cash Flow (US\$)		EV/Resource Valuation (US\$)	
Terminal Growth Rate Expected Return/ WACC (%)	2.0% 10.0%	Industry Average EV/Resource Resource	3.6 42,620,000.0
Sum of PV FCFF	188,099,222.6	Implied Enterprise Value	155,345,709.0
Plus: Net Debt Less: Interest*(1-Tax)	(5,825,532.8) (32,984.3)	Plus: Cash Less: Total Debt	7,536,458.0 (24,601,542.0)
Implied Equity Value	182,240,705.6	Implied Equity Value	138,280,624.9
Diluted Shares	523,316,100	Diluted Shares	523,316,100
Implied Share Price (US\$)	0.35	Implied Share Price (US\$)	0.26

Blended Valuation Approach (US\$)			
	TP	Percentage (%)	Weighted TP
Discounted Cash Flow (DCF)	0.35	90%	0.35
EV/Resource Multiple	0.26	10%	0.26
Blended 12m-TP (US\$)			0.34
FX Rate (USD to SGD)			1.35
Blended 12m-TP (S\$)			0.46
Upside			34.9%

Source: KGI Research



#### **Macro Outlook**

#### **Rising Global Uncertainties**

The world is currently living amidst many global uncertainties, such as the COVID-19 pandemic, the US-China trade war, geopolitical tensions, as well as high inflation and interest rate environment. Amidst these uncertainties, Asia is poised to drive global economic growth, boosted by China's re-opening at the start of 2023.

In 2022, Malaysia's economy displayed tremendous growth as it emerges from the COVID-19 pandemic, growing at the fastest rate in over 2 decades. 2022 GDP rose by 8.7%, the highest level since 2000, based on data from Bank Negara Malaysia and the Department of Statistics.

Recently, Malaysia revised its economic growth outlook for 2023 to be between 4% to 5%, according to Bank Negara Malaysia, compared to a global growth baseline forecast of 2.8% for 2023. This is further supported by the resumption of economic activities, as restrictions between International borders are lifted.

This resumption in economic activities is likely to drive the demand for iron ore up as factories resume their production, and construction projects resumes after being halted due to the COVID-19 pandemic.

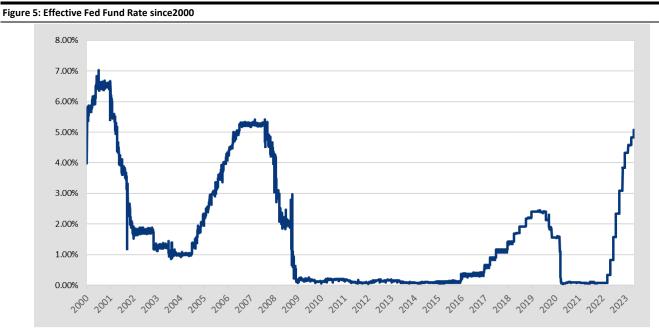
# Pressures from a high interest and inflation rate environment

The world is living amidst a high-interest rate environment, with the Federal Reserve targeting the hikes in an attempt to bring down inflation. Despite signs that the economy is

cooling, inflation is still running near its highest point since the early 1980s. The most recent interest rate hikes on 22 March 2023 and 3 May 2023 saw the Federal Reserve raising rates up by a quarter point each but also signals a possible pause in the tightening cycle to avoid financial turmoil and risks of a tough credit crackdown by banks on the horizon. The current benchmark interest rate now stands at the 5.00% to 5.25% range, the highest level in 16 years. With the latest rate hike on 3<sup>rd</sup> May 2023, analysts predict a pause in the tightening cycle, and subsequently, with rate cuts to begin around the 3<sup>rd</sup> quarter of 2023.

The high inflation rate environment would drive up the cost of production within the industry, including labour, input materials, etc. For Fortress Minerals, the high inflation rate environment has led to a higher production cost for the company, mainly for the cost of diesel to transport iron ore concentrates from the mines to Malaysia's steel mills, as well as the ports. This can be seen from Fortress Minerals' GPM and NPM, which fell YoY, partially attributed to a higher production cost from the high inflation rate environment.

The high inflation rate environment indirectly impacted the demand and supply of the iron ore industry. With lower consumption due to high inflation, demand for iron ore would fall alongside a decrease in economic activity. Supply for iron ore would be lower as companies cut their costs of production amidst high input prices for their business. Higher interest rate also makes it difficult and costly for companies to borrow fund to grow their business.



Source: Bloomberg, KGI Research



# **Industry and Market Outlook**

The industry outlook for iron ore largely depends on the global demand for steel, as iron ore is a critical raw material used in its production. In recent years, there has been a strong demand for steel, particularly from rapidly growing economies like China and India, which has driven up demand for iron ore.

#### Growth in Global Iron Ore demand

Growth in global iron ore demand is relatively muted following Chinese authorities seeking advice on rising prices. China's decision to set a modest 5% economic growth target for 2023 also disrupted the optimism of the iron ore market. With China being the world's largest importer of iron products and steel, the lower-than-expected target could potentially mean that macroeconomic stimulus policies this year may not be as strong as previously expected. As China's property markets remain in the downturn, China's economy might not recover as fast and may hinder the demand for iron ore.

The latest China Caixin Manufacturing PMI fell to 49.5 points in April 2023 from 50.0 in March 2023. This result was the first contraction in factory activity since January amid an ongoing property downturn and fears of a global slowdown. This presents a gloomy outlook for the China Market, with a stalling manufacturing growth with soft domestic consumption, soft exports, and supply chain emigration.

The demand for iron ore in China will serve as a guideline for the demand for iron for the local Malaysian market, given that Malaysia is Fortress Mineral's largest market.



Source: Bloomberg, KGI Research

# Outlook of the Iron Ore/ Steel market

Looking ahead, the industry outlook for iron ore is expected to remain mildly positive due to ongoing infrastructure development projects in emerging economies, which require steel, especially so with the re-opening of China's international border, which is the world's largest importer of iron ore, driving up the demand for iron ore. Additionally,

there is a shift towards using more sustainable materials in steel production, which could potentially benefit iron ore miners that implement sustainable practices.

Iron ore futures have also been rallying at the start of 2023 but may face challenges coming from China's gloomy outlook. The recovery of iron ore pricing will be highly dependent on the rate of recovery of China's economy. There are also concerns about the supply of iron ore, with an increase in the supply of the steelmaking ingredient and lower-than-expected steel output. This might put downward pressure on iron ore prices which would adversely affect iron ore producers like Fortress Minerals.

Overall, the industry outlook for iron ore is expected to be mildly positive in the long term, but there may be some volatility and downside in the short term due to market conditions, supply chain disruptions as well as a softening demand for iron ore.

#### **Demand for Iron Ore in Malaysia**

Demand for iron ore in Malaysia is set to recover gradually across 2023 as Malaysia emerges from the COVID-19 pandemic. Construction and factory activities, which have been greatly impacted by the COVID-19 pandemic, have gradually resumed, which will increase the demand for iron ore which is a key construction material. However, many contractors are still dealing with challenges such as labour shortages, as well as the rising cost of materials and equipment.

A new COVID-19 wave surge in Malaysia may also pose more challenges within the industry should the government decides to step up measures to contain the spread of Covid-19. This could potentially affect both the demand and supply of iron ore as local steel mills lower their demand for iron ore, and a smaller workforce leads to lower output from local iron ore mines.

Looking ahead, Malaysia's demand for iron ore is likely to increase emerging fully from the COVID-19 pandemic, due to strong potential across several construction projects such as the Malaysia Singapore High-Speed Rail Project. The construction market in Malaysia is expected to grow at an Annual Average Growth rate of 6% from 2024 to 2027, further supported by the government's aim of establishing the Public Private Partnership (PPP) 3.0 model, which is a specialized mechanism to fund infrastructure projects under the 12<sup>th</sup> Malaysia plan between 2021 and 2025.



# **Company Outlook and Future Plans**

Fortress Minerals prioritizes delivering optimal value to its shareholders. To this end, they have implemented several crucial strategies that have improved efficiency and enhanced the scale of their operations. Their initiatives encompass building infrastructure, rigorous testing of processing plants for commercial production, and constructing office buildings.

#### Ramping up production at current mines

In August 2018, Fortress completed its initial JORC resource evaluation at the East, Valley, and West Deposits of the Bukit Besi Mine. At present, they are ramping up their exploration efforts at this asset, with approximately only 15.0% of the mine area explored, representing a significant potential for exploration upside.

To this end, they have established an in-house team of dedicated geologists and mining professionals, and intend to conduct further exploration activities such as geological mapping, rock sampling, drilling, excavation, and the analysis of exploration data.

The company's team of geologists and mining professionals, who are employed in-house, are responsible for conducting geological mapping, rock sampling, drilling, excavation, and collecting and analysing exploration data.

The company's Mengapur project also presents a lot of potential for expansion, in iron ore, as well as into the sale of copper ore, with only the top layer of soil of the mine being processed. The company received cash flows from iron ore concentrates coming from Mengapur starting around September 2022 and can also expect cash flow from the sale of copper ore in the near term, serving as a second revenue driver for the company.

# **Expansion Plans with new prospecting license**

The company is constantly on the lookout for new opportunities to source new minerals within the states of Malaysia.

The company acquired 2 new prospecting licenses at the start of 2023. The 2 projects are located in Tavai, and Bidu-Bidu, with a prospecting period of 2 years. Over these 2 years, the company will be engaged in 4 different phases involving, geological mapping, Geochem, geophysical survey, drill target reporting, drilling, and mineral resource estimate reporting. Key minerals at these sites include Iron ore, Copper, Nickel, and Cobalt. This adds an additional 44,000ha of exploration

land to the company's portfolio, up around 3000% from its current assets.

The new projects would potentially provide the company with many different revenue drivers in the long run and lie in line with the company's efforts to become more sustainable in the long run.

The prospecting process would amount to around US\$3.45 million and US\$3.30 million for the Tavai and Bidu-Bidu regions respectively. These costs would be funded using mainly internal resources over the project's timeline of 2 years. Short-term debt is unlikely to increase as the company has sufficient liquidity and is planning to use the growth of other projects to fund these 2 new projects in Tavai and Bidu-Bidu.

# **Environmental, Social, & Governance (ESG)**

#### Moving to renewables

Currently, Diesel Cost makes up around 10% of production cost, while electricity takes up around 5% of production costs. The company has stated plans to build solar cells at the location of their plants at their mines, so as to act as a source of electricity for the plants in the long run. This plan aims to be achieved within the next 3-5 years. The company also plans to replace its current transportation trucks running on diesel fuel with EV trucks within the next 3-5 months to reduce the company's contribution to the carbon emission rate.

#### **Greater focus on new energy minerals**

Fortress Minerals' 2 new projects focus mainly on new energy minerals, Nickel, Cobalt, and Copper, all of which are linked to the production of cleaner energy. This would allow Fortress Mineral to contribute positively to the world's aim of reducing carbon emissions in the future.



# **Key Risks**

**Economic risk.** Economic events such as recessions, inflation, and deflation can impact the financial performance of companies and investments. The current high inflation and high-interest rates may result in a fall in demand for aquaculture products, further worsened by consumer fears of a possible recession.

**Currency risk.** Currency fluctuations can impact the value of investments made in foreign currencies and can affect the competitiveness of exports and imports. The company's operations mainly take place in USD, while the cost of production is denominated in Malaysian dollars. Hence, the company is subjected to a small amount of currency risk between the US and Malaysian exchange rates.

Commodity price risk. Commodity price fluctuations can impact the profitability of companies that produce or use raw materials as inputs to their production processes. The direct price changes of iron ore would directly impact the revenue and profit of the company as the production and trading of iron ore concentrates are the main sources of the company's business. This is very prevalent for Fortress Minerals whose main source of revenue driver comes from the sales of iron ore. The company is reducing its exposure to commodity price risk by diversifying its portfolio of mineral assets to provide more sources of revenue drivers for the company in the future. It is important for the company to assess the outlook for iron ore prices in the future to properly manage its assets and capital.

Political risk. Political events such as elections, policy changes, and international conflicts can impact the financial performance of companies and investments. Political events such as free trade agreements would accelerate the trading business and environment, while other events such as trade restrictions and sanctions, and geopolitical tensions, would directly impact the business of the company. Given that Fortress Minerals' key market still lies in Malaysia, the company is unlikely to be affected by international conflicts or trade wars.

**Supply Chain Risks.** Fortress Minerals should assess their supply chain risk constantly as they control a huge part of the supply chain from the extraction of iron ore to the point where the iron ore is being sold to local steel mills. This would include maintaining quality checks of their mining assets, which directly impact their rate of production, as well as transportation cost where diesel costs are a variable cost that affects the company's cost of production.

**Regulatory risk.** Changes in laws and regulations within the mining industry might the cost of production, and hence net profit for Fortress Minerals. These can come in the form of tax policy reform, tariffs minimum wage laws etc. Fortress Minerals should assess these risks accordingly to reduce their exposure to these risks.

**Natural Disasters.** Mining operations are vulnerable to natural disasters such as hurricanes, typhoons, and tsunamis, which can result in significant losses and disruption to production.

**Geographical Risk.** The area of exploration may not bring about enough natural resources to bring a substantial amount of cash flow for the company, resulting in a net loss for the company. It is important for Fortress Minerals to properly assess the location of its 2 new projects as well as the inferred resources of the location before they start the drilling process.



# **Financial Summary**

FYE February Income Statement	2022	2023	2024F	2025F	2026F
Revenues	43.4	53.5	69.7	71.4	72.5
Cost Of Goods Sold	(10.0)	(15.8)	(18.9)	(19.4)	(19.7)
Gross Profit	33.4	37.8	50.8	52.0	52.9
Selling General & Admin Exp.	(5.6)	(8.7)	(10.3)	(10.6)	(10.8)
Other Operating Expense/(Income)	(8.3)	(8.7)	(11.4)	(11.6)	(11.8)
Interest Income and Others	(0.8)	(2.8)	(3.1)	(3.1)	(3.1)
Profit Before Income Tax	18.7	17.6	26.0	26.7	27.2
Income Tax Expense	(4.8)	(5.0)	(4.4)	(4.5)	(4.6)
Net Income	13.9	12.6	21.6	22.1	22.6
Balance Sheet	2022	2023	2024F	2025F	2026F
Cash and cash equivalents	6.9	5.7	7.5	6.2	13.2
Inventories	3.1	4.7	4.7	4.8	4.8
Trade receivables	1.3	3.9	2.7	2.7	2.8
Other receivables, deposits and prepayments	6.4	4.5	7.1	7.3	7.4
Other current assets	0.0	1.7	1.7	1.7	1.7
Total current assets	17.8	20.5	23.6	22.6	29.8
Property, plant and equipment Other non-current assets	68.1 6.1	69.5 3.9	74.3 6.0	84.1 8.2	88.7 10.4
Total non-current assets	74.3	73.5	<b>80.3</b>	92.3	99.0
Total assets	92.0	93.9	104.0	114.9	128.9
Trade Payables	1.0	1.3	1.3	1.4	1.4
Other Payables and Accruals	5.0	8.8	8.8	8.8	8.8
Bank Borrowings & Lease Liabilities	8.3	7.8	3.9	-	-
Other current liabilities	0.8	0.1	0.1	0.1	0.1
Total current liabilities	15.0	17.9	14.1	10.2	10.2
Bank Borrowings & Lease Liabilities	16.3	7.8	5.8	3.9	1.9
Other non-current liabilities	3.9	5.3	5.0	5.1	5.1
Total non-current liabilities	20.2	13.1	10.8	9.0	7.1
Total liabilities	35.3	31.0	24.9	19.2	17.3
Share capital	22.5	22.5	22.5	22.5	22.5
Other Reserves	4.2	7.7	7.7	7.7	7.7
Retained Earnings	38.5	48.2	64.3	81.0	96.8
Equity Attributable to owners of the Company	56.8	63.0	79.1	95.7	111.6
Non-Controlling Interest	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Total Equity	56.8	63.0	79.1	95.7	111.5
Total Liabilities and Equity	92.0	93.9	104.0	114.9	128.9
Cash Flow	2022	2023	2024F	2025F	2026F
Profit Before Income Tax	18.7	17.6	26.0	26.7	27.2
Depreciation & Amort.	4.0	5.3	4.4	4.5	4.6
Other Operating Cash Flows Adjustments	0.4	3.5	_	-	_
Operating cash flows before WC changes	23.1	26.4	30.4	31.2	31.7
Change in working capital  Cash Generated from Operations	5.5 <b>28.6</b>	1.6 <b>27.9</b>	(1.2) <b>29.1</b>	(0.3) <b>30.8</b>	(0.2) <b>31.5</b>
Income tax paid	(5.9)	(5.4)	(4.4)	(4.5)	(4.6)
Income tax refunded	-	0.0	-	-	-
Cash flows from operations	22.7	22.5	24.7	26.3	26.9
Capital expenditure	(15.3)	(8.8)	(11.2)	(16.4)	(11.3)
Acquisition of a subsidiary	(21.0)	-	- '	- '	
Proceeds from disposal of plant and equipment	0.1	0.0		-	-
Other investing cashflow	0.0	(1.4)	_	_	_
Cash flows from investing	(36.1)	(10.2)	(11.2)	(16.4)	(11.3)
Repayment of bank borrowings	(4.9)	(7.4)	(5.5)	(5.5)	(1.9)
Interest paid on bank borrowings	(0.7)	(1.0)	-	_	_
Repayment of principal portion of lease liabilities	(1.5)	(2.1)	(0.3)	(0.3)	(0.0)
Repayment of interest portion of lease liabilities	(0.1)	_	_	-	-
Dividends paid	(3.8)	(2.9)	(5.5)	(5.5)	(6.7)
Other financing cashflow	21.3	(0.0)	(0.3)	0.1	0.1
Cash flows from financing	10.4	(13.4)	(11.6)	(11.2)	(8.6)
Net increase in cash	(3.1)	(1.0)	1.9	(1.4)	7.0
Effect of Exchange Rate Changes	0.2	(0.2)	-	-	-
Cash and Cash Balance BOP	7.8	6.9	5.7	7.5	6.2
Cash and Cash Balance EOP	6.9	5.7	7.5	6.2	13.2
KEY RATIOS	2022	2023	2024F	2025F	2026F
DPS (SGD cents)	1.00	0.80	1.04	1.05	1.29
Dividend yield (%)	2.9%	2.4%	3.1%	3.1%	3.8%
NAV per share (SGD cents)	11.4	12.0	15.1	18.3	21.3
Price/NAV (x)	3.0	2.8	2.3	1.9	1.6
Profitability					
EBITDA Margin (%)	54.1%	44.6%	45.4%	45.5%	45.6%
Gross Profit Margin (%)	77.0%	70.5%	72.9%	72.9%	72.9%
Net Profit Margin (%)	32.0%	23.5%	31.0%	31.0%	31.1%
INTER TRAIL WIRE STILL 1/01		20.0%	27.3%	23.1%	20.2%
	24.4%				
ROE (ex. Property FV gain) (%)	24.4% 15.1%				
	24.4% 15.1%	13.4%	20.7%	19.3%	17.5%
ROE (ex. Property FV gain) (%) ROA (ex. Property FV gain) (%) Financial Structure	15.1%	13.4%	20.7%	19.3%	17.5%
ROE (ex. Property FV gain) (%) ROA (ex. Property FV gain) (%)					



# **Appendix A**

# **Company Background**

Fortress Minerals Group is a prominent producer of iron ore concentrate in Malaysia. The core activities of the group include exploration, mining, production, and distribution of iron ore concentrate. At present, they extract magnetite iron ore concentrate from its Bukit Besi Mine, specifically from the East, Valley, and West Deposits, with a TFe grade of 65.0% and above. Their primary customers are steel mills and trading companies in Malaysia and the PRC.

#### **Assets**

**Bukit Besi Project.** In Bukit Besi, the company has a mining land of 526.2 hectares, and a 13-year renewable mining license was granted till 2023. Bukit Besi has an inferred mineral resource of 6.73MT with a grading of 44.16% FE. Leveraging the company's previous expertise in iron ore deposits nearby, the group was able to promptly initiate a Joint Ore Reserves Committee (JORC) compliant drill campaign in early 2017. With their extensive understanding of the local terrain and community, they efficiently scaled up their operations from one drill rig to five in under a year.

The Bukit Besi Mine is an open pit mine that benefits from a wealth of public utilities and infrastructure. The mine provides excellent public infrastructure and is strategically located, with good mobile network coverage, water supply, and electricity supply. The mine also provides easy access to state roads & highways, being only a 1.5hr drive to Kuantan & K. Terengganu Airports, and 86km to Kemaman Port.

#### **Iron Ore Mining and Production Process**

The iron ore mineralisation in the Bukit Besi Mine is fresh rock with very little weathering, which can only be accessed through blasting. The production process includes the blasting of an identified location, the removal, and stockpiling of identified materials, crushing, as well as concentrate processing to give the final product.

Fortress Mengapur Project. In Mengapur, Fortress Minerals is holding on to 4 leases by 2 subsidiaries, Cermat Aman holding a mining land of 185.10 hectares, and Star Destiny with 766.58 hectares, with a 5-year renewable license till May 2023, and 12-year till May 2034 respectively. The Mengapur Projects cover a total of 951.68 ha, primarily focused on the exploration of Magnetite Iron ore, while other minerals, if encountered, such as Copper, Gold & Silver, will be stockpiled for future processing.

Similarly, these Mengapur projects provided accessibility to highways to allow for seamless transportation, accessibility to

Kuantan port, which is situated 85km away, as well as a shortened delivery lead time for domestic consumers.

Figure 7: Fortress Mineral's Iron Ore Mining and Production Process







Source: Company



# **Appendix B**

# **Current Project Details**

Figure 8: Bukit Besi Mine's Geography

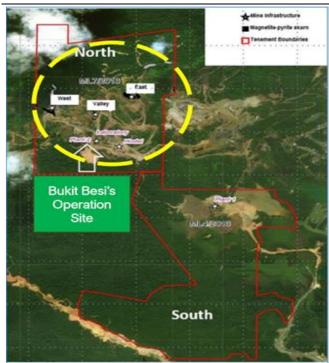
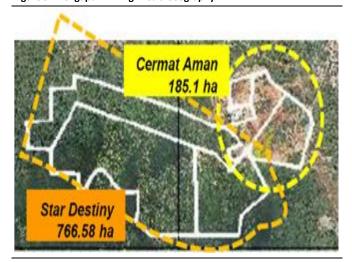


Figure 9: Mengapur Mining Area's Geography



Source: Company

Source: Company

Table 11: Summary of Fortress Minerals' Current Projects

Projects Area	Mining & Exploration Land (Hectares)	Mineral Type	Inferred + Indicated Mineral Resources (Million Tonnes)	Grading	License Period
Bukit Besi	526.2	Iron	6.73	44.16%	2020 to 2033
Maganus	Cermat Aman: 185.1	Iron	2.10	30.30%	CASB: May 2020 - May 2025
Megapur	Star Destiny: 766.58	Copper	35.89	22.93%	SDSB: May 2022 - May 2034

Note: The company does not report any ore reserves or mineral reserves, in accordance with the JORC Code (2012) guidelines at both the Bukit Besi and Mengapur Project. Mineral Resources that are not Ore Reserves or Mineral Reserves do not have demonstrated economic viability.

Source: Company, KGI Research

Table 12: Bukit Besi's Resources

	JORC Cat	Area	Minoral Type	Net Attributa	able to Fortress	Change from previous				
	JORC Cat	Alea	Mineral Type	Tonnes (Mt)	Grade (Fe %)	update (%)				
Bukit Besi		West	Iron	0.42	46.42%	93.2				
	Indicated	East	Iron	0.16	37.60%	NA				
		Sub-total	Iron	0.57	44.03%	151.5				
	Inferred	West	Iron	0.88	44.55%	-15.4				
		Valley	Iron	4.62	45.25%	24.0				
		East	Iron	0.66	36.16%	17.8				
		Sub-total	Iron	6.13	44.17%	15.7				
	Indicated + Inferred	Total	Iron	6.73	44.16%	21.3				

Note: The company does not report any ore reserves or mineral reserves, in accordance with the JORC Code (2012) guidelines at both the Bukit Besi and Mengapur Project. Mineral Resources that are not Ore Reserves or Mineral Reserves do not have demonstrated economic viability.



Table 13: Mengapur's Resources

	JORC Cat	Cut-off Grade	Mineralisation	Net attributable to Fortress		Grade Cu (%)	Grade Au g/t	Grade Ag g/t	Grade S (%)	Change from
	JUNC Cat		Willieralisation	Tonnes (Mt)	Grade Fe (%)	Grade Cu (70)	Grade Aug/t	Grade Ag g/t	Grade 3 (%)	previous updates (%)
			Skarn Cu	20.30	20.76%	0.41%	0.12	7.26	4.60%	
		0.3% Cu	Pyrrohotite Cu	0.70	29.11%	0.55%	0.28	3.48	14.14%	
	Indicated		Sub-Total	21.00	21.03%	0.42%	0.13	7.13	4.92%	No Indicated
	muicateu		Skarn Magnetite	0.34	27.66%	0.13%	0.09	1.52	6.23%	previously reported
			Breccia Magnetite	0.01	46.28%	0.21%	0.23	5.66	0.13%	
Mengapur			Sub-Total	0.34	28.01%	0.13%	0.09	1.60	6.12%	
Wieligapui			Skarn Cu	7.93	22.39%	0.41%	0.13	8.42	4.62%	-8.00%
			Pyrrohotite Cu	6.96	29.26%	0.60%	0.27	3.56	13.75%	13.00%
	Inferred		Sub-Total	14.89	25.60%	0.50%	0.19	6.15	8.89%	0.00%
	illielleu		Skarn Magnetite	1.38	27.80%	0.13%	0.12	1.35	5.89%	-74.00%
		25% Fe	Breccia Magnetite	0.38	41.51%	0.20%	0.17	6.04	0.19%	-93.00%
			Sub-Total	1.76	30.75%	0.14%	0.13	2.36	4.67%	-84.00%
	Total	0.3% Cu	Total Cu	35.89	22.93%	0.45%	0.16	6.72	6.56%	143.00%
	iotai	25% Fe	Total Magnetite	2.10	30.30%	0.14%	0.13	2.24	4.90%	-80.00%

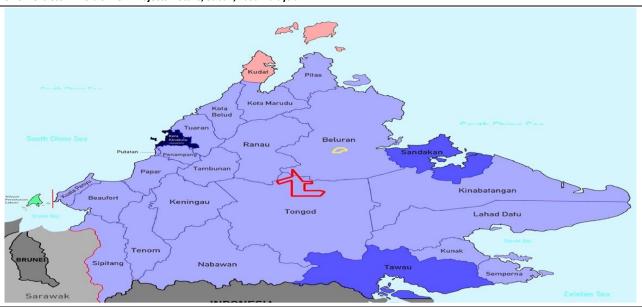
Note: The company does not report any ore reserves or mineral reserves, in accordance with the JORC Code (2012) guidelines at both the Bukit Besi and Mengapur Project. Mineral Resources that are not Ore Reserves or Mineral Reserves do not have demonstrated economic viability.

Source: Company, KGI Research

# **Appendix C**

# **Future Project Details**

Figure 10: Fortress Minerals' New Projects Details, Sabah, East Malaysia



Source: Company

Table 14: Fortress Minerals' Future Project Details

Projects Area	State	Company Name	Shareholders	License Period	License Location	Type of Minerals	Estimated Financial Commitment
Bidu-Bidu, Beluran	Sabah, East Malaysia	Saga Mineral Sdn. Bhd.	Fortress Cu Sdn . Bhd . (65%), Aston Solutions Sdn . Bhd . (35%)	15 December 2022 to 14 December 2024	40km² at Hutan Simpan Bidu Bidu , Telupid , Sabah, Malaysia	Volcanic Massive Sulphide (Copper), Iron Ore, Lateritic Nickel, Zinc and Galena	RM14,780,000
Tavai, Tongod	Sabah, East Malaysia	Kencana Primary Sdn. Bhd.	Fortress Ni Sdn. Bhd. (51%), Majestic Islands Sdn . Bhd. (35%), Ophir Metal Sdn. Bhd. (14%)	19 December 2022 to 18 December 2024	400km² at Hutan Simpan Pinangah & Tangkulap , Tongod , Sabah, Malaysia	Nickel, Copper, Cobalt	RM15,460,000



#### **KGI's Ratings**

Rating Definition

Neutral (N)

**Outperform (OP)** We take a positive view on the stock. The stock is expected to outperform the expected total

return of the KGI coverage universe in the related market over a 12-month investment horizon. We take a neutral view on the stock. The stock is expected to perform in line with the expected

total return of the KGI coverage universe in the related market over a 12-month investment

horizon.

**Underperform (U)** We take a negative view on the stock. The stock is expected to underperform the expected total

return of the KGI coverage universe in the related market over a 12-month investment horizon

Not Rated (NR) The stock is not rated by KGI Securities.

Restricted (R) KGI policy and/or applicable law regulations preclude certain types of communications,

including an investment recommendation, during the course of KGI's engagement in an

investment banking transaction and in certain other circumstances.

#### **Disclaimer**

This report is provided for information only and is not an offer or a solicitation to deal in securities or to enter into any legal relations, nor an advice or a recommendation with respect to such securities. This report is prepared for general circulation. It does not have regard to the specific investment objectives, financial situation and the particular needs of any recipient hereof. You should independently evaluate particular investments and consult an independent financial adviser before dealing in any securities mentioned in this report.

This report is confidential. This report may not be published, circulated, reproduced or distributed and/or redistributed in whole or in part by any recipient of this report to any other person without the prior written consent of KGI Securities. This report is not intended for distribution and/or redistribution, publication to or use by any person in any jurisdiction outside Singapore or any other jurisdiction as KGI Securities may determine in its absolute discretion, where the distribution, publication or use of this report would be contrary to applicable law or would subject KGI Securities and its connected persons (as defined in the Financial Advisers Act, Chapter 110 of Singapore) to any registration, licensing or other requirements within such jurisdiction.

The information or views in the report ("Information") has been obtained or derived from sources believed by KGI Securities to be reliable. However, KGI Securities makes no representation as to the accuracy or completeness of such sources or the Information and KGI Securities accepts no liability whatsoever for any loss or damage arising from the use of or reliance on the Information. KGI Securities and its connected persons may have issued other reports expressing views different from the Information and all views expressed in all reports of KGI Securities and its connected persons are subject to change without notice. KGI Securities reserves the right to act upon or use the Information at any time, including before its publication herein.

Except as otherwise indicated below, (1) KGI Securities, its connected persons and its officers, employees and representatives may, to the extent permitted by law, transact with, perform or provide broking, underwriting, corporate finance-related or other services for or solicit business from, the subject corporation(s) referred to in this report; (2) KGI Securities, its connected persons and its officers, employees and representatives may also, to the extent permitted by law, transact with, perform or provide broking or other services for or solicit business from, other persons in respect of dealings in the securities referred to in this report or other investments related thereto; and (3) the officers, employees and representatives of KGI Securities may also serve on the board of directors or in trustee positions with the subject corporation(s) referred to in this report. (All of the foregoing is hereafter referred to as the "Subject Business".)

However, as of the date of this report, neither KGI Securities nor its representative(s) who produced this report (each a "research analyst"), has any proprietary position or material interest in, and KGI Securities does not make any market in, the securities which are recommended in this report.

Each research analyst of KGI Securities who produced this report hereby certifies that (1) the views expressed in this report accurately reflect his/her personal views about all of the subject corporation(s) and securities in this report; (2) the report was produced independently by him/her; (3) he/she does not carry out, whether for himself/herself or on behalf of KGI Securities or any other person, any of the Subject Business involving any of the subject corporation(s) or securities referred to in this report; and (4) he/she has not received and will not receive any compensation that is directly or indirectly related or linked to the recommendations or views expressed in this report or to any sales, trading, dealing or corporate finance advisory services or transaction in respect of the securities in this report. However, the compensation received by each such research analyst is based upon various factors, including KGI Securities' total revenues, a portion of which are generated from KGI Securities' business of dealing in securities.

Copyright 2021. KGI Securities (Singapore) Pte. Ltd. All rights reserved.