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RECOMMENDATION - BUY

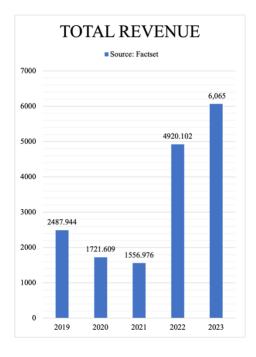
CURRENT PRICE - \$7.05

TARGET - 5 YEARS

NEW PRICE - \$27.177

COMPANY PROFILE						
CLOSE PRICE	\$7.05					
MARKET CAP	\$6,217.40	in millions				
DIV YEILD	6.47%					
BETA	0.16					
P/E	5.11					
EV/EBITDA	2.42					

SOURCE: FACTSET, EXCEL



SOURCE: FACTSET, EXCEL

EXECUTIVE SUMMARY

Whitehaven Coal (WHC) is a well-known publicly traded firm that specializes in mining coal. They are recognized for their expertise in producing and processing top-notch metallurgical and thermal coals. Under the leadership of Paul Flynn as Managing Director and CEO, WHC has successfully operated in major Asian markets such as Japan, Taiwan, Korea, and Indonesia for more than twenty years. Since 2007, the company has been listed on the Australian Stock Exchange (ASX) under the ticker ASX: WHC and has consistently shown robust market performance. The company's operations encompass the complete value chain, extending from corporate headquarters in prominent Australian cities and Tokyo to the ownership and administration of five open-cut mines and one underground mine, thereby strengthening its position in the worldwide coal market.

WHC's strategy objective is around becoming a benchmark in the industry on the ASX, propelled by its STRIVE values (Safety, Teamwork, Respect, Integrity, Value, Excellence). The company's recent mergers and acquisitions (M&A) efforts are in line with its objectives. These efforts include acquiring the Daunia and Blackwater mines from BHP Mitsubishi Alliance in April 2024, as well as obtaining a 7.5% ownership in the Narrabri mine from EDF Trading Australia Proprietary Limited in August 2023. These acquisitions are a component of WHC's overarching plan to improve its collection of assets and operational authority. WHC remains dedicated to fulfilling stakeholder expectations by implementing a range of environmental, social, and governance (ESG) measures, while encountering sustainability obstacles. These endeavors, although frequently essential for businesses, have made significant contributions towards several UN Sustainable Development Goals (SDGs), effectively harmonizing profitability with ethical business principles.



SOURCE: YAHOO FINANCE (SHARE PRICE DATA)

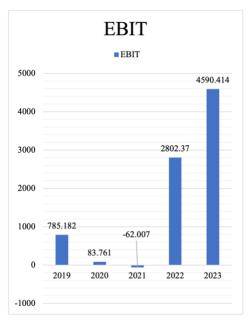


FIG 1, SOURCE: FACTSET, EXCEL

WHC has demonstrated strong financial performance, with a notable 23.3% increase in revenue, a significant 36.4% rise in EBIT (earnings before interest and taxes), and a substantial 34% growth in EBITDA (earnings before interest, taxes, depreciation, and amortization) compared to 2019-21 (FIG 1). The primary expenditures of the company consist of operational expenses, royalties, and taxes. The notable growth in foreign exchange earnings has played a significant role in the 36% rise in net profit. WHC operates in the Australian coal mining business, which is considered desirable due to its high entry barriers and moderate competition. This industry benefits from Australia's dependence on mining to support its economy. Nevertheless, WHC encounters significant rivalry from prominent industry leaders like as Glencore, BHP, Yancoal Australia, Alliance Resource Partners, and Peabody Energy. Although facing these difficulties, WHC's underestimation offers a favorable investment prospect, backed by strategic measures taken to address industry problems and a firm emphasis on operational effectiveness and financial stability.

COMPANY DESCRIPTION

Whitehaven Coals (WHC) is a publicly listed private coal mining company, with Paul Flynn as the Managing Director and CEO (Pattern 2023), specialises in producing and processing quality 'Metallurgical' and 'Thermal' coals that are highly sought after by developing countries within Asia – such as Japan, Taiwan, Korea, Indonesia, etc to name a few – for over 20 years, and is listed on the Australian Stock Exchange (ASX) as 'ASX:WHC' since 2007 (Whitehavencoal 2023b). As of 2nd April 2024, the stock price of ASX:WHC was found to open at AUD7.18 and closed with AUD7.10 with a market capitalization of 6.651Bn, displaying a reputation for excellence in performance for the shareholders (ASX 2024). WHC's operates throughout the value-chain, from corporate offices based in Sydney, Newcastle, Gunnedah, Brisbane and an international branch in Tokyo where their biggest clients reside (63% of coal sales revenue) (Whitehavencoal 2024a), to mining operations and ownership of 5 opencut and 1 underground mines (Whitehavencoal 2024c; Appendix A), and to processing, washing before selling and market its products to customers Whitehavencoal 2024b). With a vision of being the industry benchmark on the Australian Stock Exchange (ASX), by leveraging their STRIVE (Safety, Teamwork, Respect, Integrity, Value, Excellence) values to deliver and own high-quality, low-cost mines for premium markets, while coordinating desirable coal business portfolio (Whitehavencoal 2024a). According to findings of the key success factors (KSF) and capabilities of WHC, the clear strategic objectives to respond and adapt to the ever-changing contemporary business environments using strategies such as major Merger and Acquisitions (M&A) in the last few years, sustainability initiatives towards social, environment and governance (ESG) with sustainability development goals (SDG) metrics, and innovative solutions to improve productivity and quality.

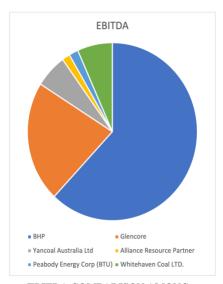
RECENT M&A INITIATIVES

- 1. The acquisition of Daunia and Blackwater mines from BHP Mitsubishi alliance (BMA) on 2nd April 2024, opened opportunities for Whitehaven to own more coal mines aligning with its strategic objectives (BHP 2024).
- 2. The announcement on 18 oct 2023 to acquire south-blackwater coal mine in Brisbane (State Development of Queensland 2024) aligns with Whitehaven's strategic objectives to own more valuable coal mine.
- 3. The acquisition of EDF Trading Australia Pty Ltd whom own 7.5% stake of Narrabri mine completed on 22 Aug 2023 will give Whitehaven greater power to control the mining operations (Whitehaven coals 2019).

INDUSTRY ANALYSIS

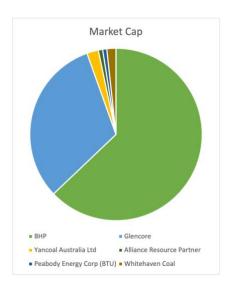
Whitehaven coal operates within the coal mining business, excavating coals from earth within the Australian landscape to be processed and sold to customers (Ibisworld 2023a). From our analysis of PESTEL (Appendix B) and five-forces analysis (Appendix C) we can conclude that the mining industry within Australia is relatively attractive due to the nature of the industry dealing with commodities that are essential for less developed cities to generate power to maintain social stability energy and the country-specific capabilities of Australia - which relies on mining to sustain the economy- (Ibisworld 2023b), resulting in a supportive political, social and legal factors that keeps competition stable (Appendix B) with low new-entrant due to various regulatory restrictions and capital intensiveness (Appendix C).

- Competition Moderately High. Mining in Australia is one of the main GDP contributors by many large mining companies locally and externally. This increased concentration of players led to high competition for natural resources and mining sites, leading to increased cost of mining bidding processes and strategic product differentiation (Ibisworld 2023b).
- Threat of New Entrant Very Low. The industry is highly regulated and needs large capital costs to build the infrastructure and systems to effectively carry out the operations leading to a high barrier to entry (Thomson 2023).
- Supplier Power Low. Suppliers have very low negotiation power due to the low saturation of mining companies. However, with the Australian population being relative, supplies for labour have also been an issue for mining companies. Thus, the overall power of suppliers is low overall (Ibisworld 2023b).
- Customer Power Moderately High. With export as their majority of business structure towards developing East Asia sectors such as Japan, Taiwan, Malaysia, and Korea, Whitehaven has limited sales channel and power over its customers (Whitehavencoal 2023b).
- Threat of Substitute Very High. With development and initiatives towards environment effects and technological advancement, need for thermal coals for energy has been reducing through the substitute of



EBITDA COMPARISON AMONG COMPETITORS

SOURCE: FACTSET, EXCEL



MARKET CAPITAL COMPARISON AMONG COMPETITORS

SOURCE: FACTSET, EXCEL

alternative energy sectors such as green renewable energy (Ibisworld 2023b).

OUR MAIN COMPETITORS

The competitors chosen are:

- Glencore a coal mining giant in Australia with more than 17.6billion revenue. A seaborne thermal coal producer who strategizes on innovation and adaptation business models to meet the needs of tomorrow (Glencore 2023).
- 2. BHP Another player with 11.43 billion revenues from coal mining operations (BHP 2023).
- 3. Yancoal Australia An Australian coal mining company with large Chinese ownership with 7.95 billion in revenue (Yancoal 2023).
- 4. Alliance resource partner A diversified natural resource company based in the USA, operating in western and southern Australia and globally without any coal operation in Australia (Alliance resource partners 2023).
- 5. Peabody Energy A leading coal producer operating in the USA and Australia, supplying seaborne operations. With Australian coal revenue is estimated at 1 billion dollars (Peabody 2023).

COMPETITION GAP ANALYSIS (APPENDIX F AND G)

Using the various ratings on key success factors of the different businesses, factors such as coal mining operations focus on evaluating their revenue sources, Market share capabilities through analysing their market performance and share percentages, accountability to communities, environmental initiatives, and technological capabilities using the different sustainability reports to determine their effective efforts on sustainability. From this analysis using the strategic canvas introduced in 'Blue ocean strategy' (Chan & Mauborgne 2005), we can determine that WHC illustrates a rather average performance compared to the competitors in terms of sustainability efforts (Appendix G), but has aligned focus on the coal mining industry sector (Thomson 2023) and business operations (Whitehavencoal 2023b). Some opportunities WHC can seek to re-enforce include increase technological adaptation and strategic objectives to increase market shares and penetration. With the increase in competition, cost of owning mining sites will increase and reduce resource distributions. In the short term, with over-saturation of companies competing for the same resources (Ibisworld 2023b), prices for coal will be reduced due to the increase in supply and little demand. Considering the long-term implications, due to the increase in risk of natural resource depletion, economists will have to rely on alternative energy sources (Appendix B). Therefore, it is important for policymakers to regulate the industry and control the industry players and companies need to continue to innovate and adopt to new technological innovations.

PROFITABILITY RATIOS (APPENDIX H)

Using Operating profit margin (OPM), Return on Equity (ROE) and Return on Assets (ROA) as ratios for the comparison between the competitors with WHC (Appendix H), WHC has shown above-average performance in two ratios;

- 1. OPM at 62% as compared to the industry average of 33%
- 2. ROA of 16.52% compared to the industry average of 13%. However, ROE illustrated an average performance of 21.74% compared to the industry average of 20.63%.

This suggests that WHC was effective in controlling the expenses of business operations and was efficient in its utilization of assets management capabilities and can look into financial strategies to better improve ROE via share-buybacks.

			Financia	I Ra	tios Analysis					
	Whitehaven (\$AUD)	Gle	encore (\$GBP)	ВН	P (\$AUD)	Yancoal (\$AUD)	Alli	ance (\$USD)	Pe	abody (\$USD)
Sale revenue	\$ 3,844,900,000.00	\$	175,360,000,000.00	\$	83,338,000,000.00	\$ 7,664,000,000.00	\$ 2	2,555,500,000.00	\$	4,946,700,000.00
COGS	\$(1,199,200,000.00)	\$	(160,740,000,000.00)			\$ (2,514,000,000.00)	\$1	,582,000,000.00	\$	(3,388,400,000.00
less operating expense		\$		\$	(54,801,000,000.00)		\$	19	\$	
less depreciation and ammortization	\$ (258,800,000.00)	\$	(5,310,000,000.00)	\$	(7,885,000,000.00)	\$ (1,014,000,000.00)	\$	268,000,000.00	\$	(321,400,000.00
Net income	\$ 1,143,700,000.00	\$	3,440,000,000.00	\$	10,989,000,000.00	\$ 1,819,000,000.00	\$	582,300,000.00	\$	815,600,000.00
Total assets	\$ 7,607,000,000.00	\$	97,167,000,000.00	\$	152,180,000,000.00	\$11,810,000,000.00	\$ 2	2,788,400,000.00	\$	5,962,000,000.00
Total liability	\$ 2,346,500,000.00	\$	67,173,000,000.00	\$	79,270,000,000.00	\$ 3,368,000,000.00	\$	929,800,000.00	\$	2,355,000,000.00
Previous years assets	\$ 6,239,200,000.00	\$	110,219,000,000.00	\$	138,390,000,000.00	\$13,371,000,000.00	\$ 2	2,728,000,000.00	\$	5,611,000,000.00
Shareholder equity	\$ 5,260,500,000.00	\$	29,994,000,000.00	\$	72,910,000,000.00	\$ 8,442,000,000.00	\$ 1	,858,600,000.00	\$	3,607,000,000.00
Average total assets	\$ 6,923,100,000.00	\$	103,693,000,000.00	\$	145,285,000,000.00	\$12,590,500,000.00	\$ 2	2,758,200,000.00	\$	5,786,500,000.00
operating profit	\$ 2,386,900,000.00	\$	9,310,000,000.00	\$	20,652,000,000.00	\$ 4,136,000,000.00	\$4	1,405,500,000.00	\$	1,236,900,000.00
ОРМ	62%		5%	-	25%	54%		172%		25%
ROE	21.74%		11.47%		15.07%	21.55%		31.33%		22.61%
ROA	16.52%		3.32%		7.56%	14.45%		21.11%		14.09%

Forces	Opportunities	Threats
	Political support (reduce regulatory restrictions and regulations within the industry)	Unstable political stability Internal conflicts
Political	2.Increased grants for industry players	Increase regulatory restriction on industry.
	3.War – Increase demands for thermal coals.	 Increase union activity – FIFO workers, Unfair treatments of workers
Economic	Good Economic stability increase investment for industry and promotes trades.	Inflation Interest Recession – (unemployment à increase theft and reduce social stability)
	Increase demands for coal	Cultural, heritage negligence – increase opposition among stakeholders.
Social	2. Enhance employment image	changing social norms - with technology?
	3. Diversity, equity, inclusion among stakeholders	3.
Technolog y	Innovation for Mining industry (Automation, robotics) Remote monitoring and control Reduce risk for humans	Divergent from the need for Coal to alternative energy Increase VUCA due to speed of innovation. Infrastructure dependency
Environme	Sustainability efforts reduces	Natural disaster
ntal	climate change	2. Climate Change
Legal		

INVESTMENT RISKS

Some investment Risks we have analysed as show in Appendix B are:

- 1. Market Risk As a company that deals with commodities products such as coal, prices of products are highly susceptible to demand and global economic conditions such as recent global economic.
- 2. Regulatory and political risks With the industry that is highly regulated by the governing bodies, any change in political agenda would implicate the industry in different directions and operational cost. For example in recent civil war in Ukraine, the demand for coal and energy has increased.
- 3. Transitional risk As society skews preferences toward cleaner, greener, renewable energy and increasing availability of technological and innovative solutions, Coals is bound to reduce its advantage for efficient energy production over time.
- 4. Environmental factors With increased climate change and global warming, conditions for work and mining activities are impacted greatly due to increasing ambiguous extreme weather conditions.

RELATIVE VALUATION

The price-to-earnings ratio depicts the correlation between the share price of a stock with the earnings per share. It is a commonly used ratio by financial analysts that seeks to explain how much the investor is paying per share for the company's earnings. (Damodaran).

From the price-to-earnings ratio of Whitehaven, we can see that the stock is moderately priced in comparison to the peers selected. Yancoal mining has the Lowest price-to-earnings among its peers and Glencore with the highest price-to-earnings. From FIGURE 2, we can see that the average price-to-earnings is 8.7, showing the stock has the potential to increase (Undervalued) from the current price of \$7.95 to 12.58 assuming the earnings per share constant (58% increase).

EV/EBITDA is another commonly used metric to identify if a firm is undervalued or overvalued. It uses enterprise value which is market capitalization added to net debt and earnings before interest tax depreciation and amortization. (Damodaran)

From figure 2, we can see that the EV/EBITDA ratio for Whitehaven is below the average of the peers, showing a relative undervaluation of the stock. Moreover, to examine Whitehaven's valuation more precisely, the EV/SALES, EV/EBIT and the PEG ratios have also been chosen in this report to determine if the comparable can give further guidance in our relative valuation. The PEG ratio can help us compare companies in the sector with other growth rates. The EV/SALES gives us knowledge regarding the sales of the companies as well in relation to EV. Furthermore, the EV/EBIT is added to get an understanding of the earnings yield goes into the company's value. Our findings states that Whitehaven is mostly currently traded below its competitors on average for most of our multiples, signalling a buy on this stock.

Figure 2:

	Market data			Financial Data							
	Price	Market Cap	TEV	Sales	EBITDA	EBIT	EV/Sales	EV/EBITDA	EV/EBIT	P/E	PEG
Company											
BHP	\$44.89	2,28,183.80	2,44,380.40	83,338	36,423	28,537	2.93	6.71	8.56	20.70	-0.35
Glencore	\$9.45	1,14,814.00	1,52,959	1 753 500 0,1	12,910	7,600	0.47	6.28	10.48	9.82	0.17
Yancoal Australia Ltd	\$5.96	7,869.80	6,620.80	7,664.00	3,573	2,559	0.69	1.49	2.03	3.60	-0.08
Alliance Resource Partner	\$22.82	2,922	3,286	2,555.50	893	625	1.30	3.70	5.25	5.00	0.53
Peabody Energy Corp (BTU)	\$22.53	2,834	2,385	4,515.20	1,033	660	0.53	2.31	3.61	6.30	0.16
Whitehaven Coal	\$7.43	6,217.40	4,762.30	6,072.33	3,919.97	3,729.26	1.24	2.42	2.85	5.11	0.09
Average							1.19	3.82	5.46	8.42	0.09
Median											
*Above information retrieved from	om factset d	and CapitalIQ 20	24-05-17, all valu	ues in millions							

FOOTBALL FIELD VALUATION

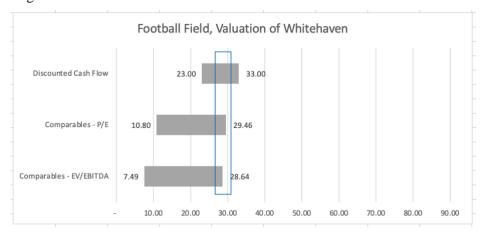
<u>Valuation</u>	Valuation Metrics Targ			Valuation Range Multip	iples to Share Price	
Low (x)	High (x)	Financials (AUD\$m)	Low	Difference	High	
1.49	6.71	3,919.97	7.49	21.14	28.64	
3.60	9.82	3.00	10.80	18.66	29.46	
0.10	0.13	n/a	23.00	10.00	33.00	
	Low (x) 1.49 3.60	Low High (x) (x) (x) 1.49 6.71 3.60 9.82	Low High (x) Financials (AUD\$m) 1.49 6.71 3,919.97 3.60 9.82 3.00	Low High (x) Financials (AUD\$m) Low (AUD\$m) 1.49 6.71 3,919.97 7.49 3.60 9.82 3.00 10.80	Low High (x) Financials (AUD\$m) Low Difference 1.49 6.71 3,919.97 7.49 21.14 3.60 9.82 3.00 10.80 18.66	

Refer to valuation chart in figure 3.

WHITEHAVEN COAL LTD. (WHC)

ASSETS AND CO.

Figure 3:



DISCOUNTED CASH FLOW

ASSUMPTIONS:

Whitehaven performed record revenues for 2022 and 2023. It is assumed that Whitehaven's revenues will continue to increase but at a lower rate of 4.08% from 2024 and onwards from current levels. A 3.95% terminal growth rate is used which is above the inflation and below the GDP growth rate. Arithmetic averages are used to calculate the forward-looking numbers based on the last five years prior history with some adjustments for extreme numbers.

COST OT DEBT, COST OF EQUITY AND WACC

The beta was calculated by using data available from Capital IQ on stocks from the "S&P/ASX All Ordinaries Index Price Return-Index Value (Weekly)" and data on weekly returns from the WHC share with ticker WHC.AX. After running a regression beta analysis, the beta found was 1.16. This value was used to calculate the unlevered beta (0.97) as well.

Moreover, after our findings, we proceeded to check Australia's country equity risk premium by using a forward premium approach instead of a historical one by taking the price of the index dividends as 'cash flows + the face value' of the index today. Our findings show an equity risk premium of 6.26%.

Whitehaven's capital structure consists of barely no debt at all, making it having almost no financial leverage. This can cause both advantages and disadvantages to the company. Since no interest payments are barely being made, this improves Whitehaven's cash flow. Hence, Whitehaven cannot use the full benefit support from tax shields. The firm may also use more flexibility in its choice of strategic decisions since it does not need to comply with debt covenants.

Our findings may suggest that an investor following this stock should be aware that Whitehaven may have hefty costs for their funding as debt is usually less expensive than equity. This may also be due to investors being compensated for the higher risk due to higher firm specific risk.



Environmental Sustainability



source: (whitehavencoal.2020)

ENVIRONMENTAL IMPACTS

With the Health, Safety, Environment, and Community (HSEC) Committee reporting to the Board on business risks and sustainability issues, the governance structure of Whitehaven Coal prioritises sustainability. Four permanent Board committees ensure that the organisation has a robust risk management culture. The Audit & Risk Management Committee, which meets a minimum of four times per year to discuss critical risks, including those associated with climate, exercises oversight over climate change. Senior management oversees climate-related affairs throughout the organisation with the assistance of the Sustainability Working Group. They are accountable to the Audit & Risk Management and HSEC Committees. Climate-related risks are incorporated into the enterprise risk management framework of Whitehaven. Thorough scenario planning is conducted using the TCFD's framework, which centres on physical risks arising from extreme weather events, technological advancements, policy modifications, and carbon pricing.

Through Low Emission Technology Australia (LETA), a \$550 million fund is established by the Australian black coal industry (Whitehavencoal, 2020) Furthermore, Whitehaven Coal believes in investing in low-emission technologies (Whitehavencoal, 2020). LETA collaborates with industry and government to develop carbon-reduction initiatives (Whitehavencoal, 2020), including the renewable hydrogen production project and the Carbon Transport and Storage Company CCUS project. In addition to contributing to the global development of CCUS and meeting the rising market demand for high-quality Australian coal, the organisation actively pursues opportunities presented by climate change.

Whitehaven evaluates its operational and financial resilience in the face of prospective lower-carbon scenarios in accordance with TCFD recommendations (Whitehavencoal, 2020). The organisation anticipates enduring resilience and value creation, even in the face of climate-related obstacles, including a 2°C scenario that is consistent with the Paris Agreement. As indicated by the present share price of \$7.05 and forecasts indicating a potential surge to approximately \$25, thus this indicates that the market acknowledges Whitehaven's strategic trajectory. The surge in the company's stock value signifies optimism regarding Whitehaven's capacity to prosper amidst carbon limitations, all the while upholding its dedication to ecological guardianship.

Whitehaven Coal's stock price is very vulnerable to environmental changes (Whitehavencoal, 2020), mainly because of its engagement in coal mining. Regulatory modifications targeting the reduction of carbon emissions may lead to higher expenses for compliance or limitations on coal mining, which could have an impact on profitability and the stock price. The adoption of cleaner energy sources may lead to a decrease in the demand for coal, which could result in a decline in profitability. The potential for legal disputes arising from environmental harm may potentially impact the value of a company's shares (Whitehavencoal, 2020). Shifts in investor perception towards environmental, social, and governance (ESG) considerations may result in decreased investment. In addition, environmental factors such as severe weather occurrences have the potential to disrupt operations, which in turn can have an

influence on production and stock values. It is essential for investors keeping an eye on WHC's stock to closely monitor regulatory changes, movements in energy demand, and environmental considerations (Whitehavencoal, 2020).

CONCLUSION

Whitehaven Coal's EV/EBITDA ratio of 2.7, which is far below the industry average of 3.82, suggests that the company is severely undervalued relative to competitors such as BHP and Glencore. The market may be concerned about Whitehaven's operational and legal risks, high debt levels, and poor cash flow, which could explain this situation.

The coal industry is confronted with significant obstacles due to mounting environmental apprehensions and a worldwide transition towards renewable energy sources. Investors should evaluate Whitehaven's operational efficiency, financial stability, and interaction with stakeholders. Although there are difficulties, the undervaluation of Whitehaven offers a possible chance to buy, as long as Whitehaven shows effective governance and takes proactive measures to address industry concerns. According to a discounted cash flow (DCF) analysis, Whitehaven's intrinsic value, which is determined by discounting future free cash flows to their present value, is considerably greater than its current market price. This highlights the fact that the company is now undervalued.

RECOMMENDATION

Whitehaven Coal has a substantial undervaluation based on our multiple valuation method and DCF model. We advise a strong buy with a \$25 per share target price. To guarantee long-term success and viability, investors should keep a careful eye on Whitehaven's strategic efforts, especially in the operational and environmental spheres.

APPENDICES

	Our newest and	Operation	Maules Creek
Maules Creek	largest coal mine Maules Creek produces some of the	Ownership	Whitehaven Coal 75%, Itochu 15%, J Power 10%
	highest quality high energy thermal coal in Australia, and has been in operation since 2015. The mine has coal reserves to support 40 years of production, and we anticipate	Commenced operations	2015
		Location	45km south east of Narrabri
	coal sales from the mine will deliver \$2.4 billion in royalties in its first 21 years of production. The mine uses ultra-class	Type of operation	Open cut coal mine
	mining equipment.	Operating hours	24 hours a day / 7 days a week
	Production approval	13Mt run of mine coal per annum	
		Stage of operation	In operation
		Workforce	~700
Narrabri & (Extension)	nas neen operating	Operation	Narrabri Underground Coal mine
ζ=	successfully since 2012	Ownership	Whitehaven 77.5%, 3 others each with 7.5%
	The mine is Whitehaven's only underground operation and	Commenced operations	2012
	employs around 500 people, the majority of whom live locally.	Location	17km south east of Narrabri, 70km north west of Gunnedah
	The Narrabri underground mine is approved to produce 11 million tonnes per annum of high quality thermal coal	Type of operation	Underground coal mine
	until 2031. The Narrabri longwall is fully automated and is one of the most advanced in Australia.	Operating hours	24/7
		Production approval	11.0 Mt run of mine coal per annum
		Stage of operation	In operation
		Workforce	500

Providing local jobs for decades to come

The Narrabri underground coal mine has been operating since 2012 and employs around 500 people, most of whom live in the region. The mine is approved to extract coal at a rate of up to 11 million tonnes of run-of-mine coal per annum until 2031. The Stage 3 Extension Project is a proposal to extract coal to the south of the existing mine.

Coal will be mined using the underground longwall mining method already used successfully and safely at the mine, and using the established surface infrastructure, including the existing coal handling preparation plant, rail loop, box cut and offices.

The proposed extension would extend the life of the mine from 2031 to 2044, providing continued employment for hundreds of locals. The Extension would also allow for the socio-economic benefits associated with the mine, including spend with local businesses and royalty payments to the NSW Government, to continue for more than another decade. For more detail, **download the fact sheet**.

In January 2022, after more than a year of review, the NSW Department of Planning, Industry and Environment (DPIE) recommended that the Stage 3 Extension Project is in the public interest and approvable subject to conditions. **Read DPIE's review here**.

On 1 April 2022 the Project was approved by the NSW Independent Planning Commission (IPC).

Key benefits



\$599m

additional net economic benefit to NSW



500

jobs continuing for



\$317m

of direct wages into the local community to 2044 (NPV basis)



\$259m

in additional royalties to the NSW Government



\$247m

of local supplier spend to 2044 (NPV basis)



75%



Werris Creek

The bedrock of our open-cut operations

The Werris Creek open-cut coal mine is located 4km south of the town of Werris Creek in North West NSW.

Werris Creek commenced operations in 2005 and has resources to support production until approximately 2024.

The open-cut mine overlays and intersects the former Werris Creek Colliery, which was a bord-and-pillar underground mine operated by the Preston Coal Company from 1925 to 1963.

The mine produces both thermal and PCI coal with low to medium ash, low sulphur, low phosphorous and medium to high volatility. Coal from Werris Creek is transported directly by rail to the Port of Newcastle, where it is exported to our customers across Asia.

Operation	Werris Creek mine
Ownership	100%
Commenced operations	2005
Location	4km south of Werris Creek, 15km north of Quirindi
Type of operation	Open cut coal mine
Operating hours	24/7
Production approval	2.5 million tonnes run of mine coal per annum
Stage of operation	In operation
Workforce	150

Tarrawonga

One of Whitehaven's three foundation mines

Tarrawonga is part of the bedrock of Whitehaven's business since the company's formation in 1999 in the Gunnedah Coal Basin.

The Tarrawonga open cut mine produces high-quality thermal coal and semi-soft coking coal for export markets with reserves to support more than 20 years of coal extraction. Whitehaven took full ownership of the mine in April 2018 after purchasing Idemitsu's 30% joint venture interest.

Tarrawonga successfully utilises improved mining techniques to reduce overburden removal costs. Whitehaven has also recently approved an expansion to its fully approved rate of 3.5Mtpa ROM coal by the introduction of a new mining fleet from FY20.

Operation	Tarrawonga mine
Ownership	100% ownership
Commenced operations	2006
Location	16km north east of Boggabri
Type of operation	Open cut coal mine
Operating hours	24/7
Production approval	3.5 million tonnes run of mine coal per annum
Stage of Operation	In operation
Workforce	180

Vickery

Powering the region

Vickery will deliver more jobs and a stronger future for North West NSW

The Vickery Extension Project (Vickery) is a proposal to construct an open-cut coal mine and associated onsite infrastructure about 25 kilometres north of Gunnedah. The mine will produce a majority metallurgical coal for steel-making, with the balance being high quality thermal coal destined for premium export markets in our region.

The proposal builds upon, and further optimises, an already-approved mine, on a site that has already been extensively and safely mined over many years. The proposal will make Vickery and our neighbouring operations more efficient and sustainable over the longer term.

In August 2020, Vickery was approved by the Independent Planning Commission NSW.

\$1.2b

net economic benefit to NSW 950

jobs during construction and operations to be created \$700m

capital investment

Winchester South

Growing our presence in Queensland

Winchester South is a proposed new opencut coal mine in Queensland's Bowen Basin, which has been recommended to proceed by the Queensland Government's Coordinator General, subject to conditions.

It will produce a primary metallurgical coal product to make steel and a secondary thermal coal product for energy generation – and create about 500 jobs.

The mine will produce up to 17 million tonnes per annum of run-of-mine (ROM) production to supply the international market.

Located 30km south-east of Moranbah, the project will involve the construction of a coal processing plant and a rail loop to connect with the existing Bowen Basin coal rail network. As it is in a well-established coal region, the site has direct access to key rail and port infrastructure, providing multiple coal export options.

The project was declared a Coordinated Project by the Queensland Covernment, recognising the potential strategic significance of the project locally, regionally and to the state of Queensland more broadly.

On 23 November 2023, the Queensland Covernment's Coordinator Ceneral recommended the project to proceed, subject to conditions, following an extensive assessment process.

Powering the region

Vickery will deliver more jobs and a stronger future for North West NSW

The Vickery Extension Project (Vickery) is a proposal to construct an open-cut coal mine and associated onsite infrastructure about 25 kilometres north of Gunnedah. The mine will produce a majority metallurgical coal for steel-making, with the balance being high quality thermal coal destined for premium export markets in our region.

The proposal builds upon, and further optimises, an already-approved mine, on a site that has already been extensively and safely mined over many years. The proposal will make Vickery and our neighbouring operations more efficient and sustainable over the longer term.

In August 2020, Vickery was approved by the Independent Planning Commission NSW.



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jobs during construction and operations to be

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capital investment



A contemporary rehabilitation program

The Sunnyside open-cut mine was operational from 2008 until 2012, when it was placed into care and maintenance.

The mine resumed operations in the second half of 2017 with the aim of mining the remaining coal and fully rehabilitating the site. Coal sales from the mine will effectively fund the full and final rehabilitation of the mine site, providing a contemporary example of a rehabilitation program to the local community.

Operation	Sunnyside Mine
Ownership	100% ownership
Commenced operations	2008-2012; recommenced in 2017
Location	15km west of Gunnedah
Type of operation	Open cut coal mine
Operating hours	5 days per week
Production approval	0.4 million tonnes run of mine coal per annum
Stage of operation	Rehabilitation
Workforce	20

B. Pestel Analysis

PES	TEL Analysis of Coal	Mining Industry
Forces	Opportunities	Threats
	Political support (reduce regulatory restrictions and regulations within the industry)	Unstable political stability – Internal conflicts
Political	2.Increased grants for industry players	Increase regulatory restriction on industry.
	3.War – Increase demands for thermal coals.	3. Increase union activity – FIFO workers, Unfair treatments of workers
Economic	Good Economic stability increase investment for industry and	Inflation Interest Recession –
	promotes trades.	(unemployment à increase theft and reduce social stability)
	Increase demands for coal	Cultural, heritage negligence – increase opposition among stakeholders.
Social	2. Enhance employment image	 changing social norms - with technology?
	Diversity, equity, inclusion among stakeholders	3.
Technolog	Innovation for Mining industry (Automation, robotics)	Divergent from the need for Coal to alternative energy
у	Remote monitoring and control	Increase VUCA due to speed of innovation.
	Reduce risk for humans	Infrastructure dependency
Environme	Sustainability efforts reduces	Natural disaster
ntal	climate change	2. Climate Change
Legal		

C. Five Forces Analysis

Five Forces of Coal mining Industry				
Forces	Factors	StrengthWeaki ess Rating 1 - Strength 10 - Weakness		
Competitors	Industry concentration – In Australia Mining being one of the important sector filled with more than Product differentiation Price competition	8		
Suppliers bargaining power	Suppliers Labor suppliers Equiment suppliers			
Buyers bargaining power	•			
Threat of new entrants	High barrier of entry due to cost requirement Regulatory barriers Distribution channels	1		
Threat of Natural gas substitution Technological innovation – reduce energy requirements		5		
Complementary products	Utilities suppliers Complementary Infrastrucre developers			

D. Sustainability efforts:

How we create value

Our purpose

To support and sustain regional communities by exporting high-quality thermal and metallurgical coal from Australia to the world

CUSTOMERS

Supporting energy security and decarbonisation

We supply high-quality coal to customers across Asia, supporting energy security and economic development, while helping meet decarbonisation goals.

COMMUNITIES

Supporting our communities

We support local and regional communities through job creation, local procurement and direct investment, and by preserving and managing cultural heritage in our operations.

PEOPLE

Safe, inclusive and rewarding workplace

We strive to ensure a safe, inclusive, diverse and rewarding workplace to attract, motivate and retain talent.

BUSINESS STRATEGY

Strong long-life business

We identify, develop and operate high-quality, cost-efficient and long-life thermal and metallurgical coal assets.

CONDUCT

Responsible business conduct

on the committee to conducting our business ethically and with integrity and maintaining a strong governance framework.

ENVIRONMENT

Responsible environmental stewardship

We aim to be responsible stewards of the natural environment by minimising and/or mitigating our impacts and reducing our carbon footprint.

SHAREHOLDERS

Strong financial results

We strive to deliver strong and consistent returns to shareholders and joint venture partners through efficient and effective operations and prudent capital allocation.

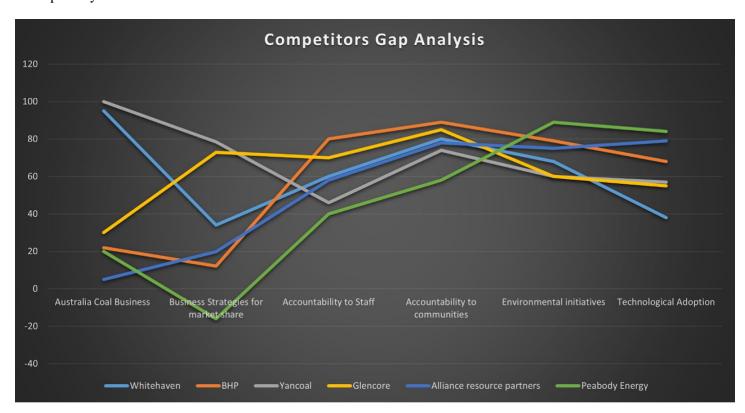
E. UN-SDG and Sustainability

Pillar Material sustainability topic Relevant UN SDGs1 Business model and markets Climate-related risks and Strong, long-life business opportunities Regulation and policy PEOPLE Workforce safety and wellbeing Talent attraction, development Safe, inclusive and rewarding workplace and retention **ENVIRONMENT** Minimising environmental impact of operations Responsible environmental stewardship · Land rehabilitation and closure · Contributing to local prosperity and sustainability communities Community engagement CONDUCT · Business conduct Responsible supply chain Responsible business conduct Cybersecurity and privacy

F. Strategy Canvas

,	Australia Coal Business	Business Strategies for market share	Accountability to Staff	Accountability to communities	Environmental initiatives	Technological Adoption			
Whitehaven	95	34	60	80	68	38			
BHP	22	12.19	12.19 80 89		79	68			
Yancoal	100	78.48	46	46 74		57			
Glencore	30	72.86	70	85	60	55			
Alliance resource partners	5	19.8	58	78	75	79			
Peabody Energy	20	-16	40	58	89	84			
Legends									
Australia Coal Business		Looking into commitments into the industry by analysing the business revenue streams.							
Business Strategies for market share	Looking i	Looking into Strategic capabilities of business by analysing business's industry market share percentage and profitability potential							
Accountability to Staff	Look into the business sustaianbility aproach into Employees satisfaction, safety and overall feeling for the business and industry.								
Accountability to communities	Look into the business sustaianbility aproach into communities satisfaction, involvement and overall feeling for the business and industry.								
Environmental initiatives	Look into the business sustaianbility aproach into Environmental impacts and efforts by the business.								
Technological Adoption	Look into the Change, innovation and Technological adoptation capabilities of the business to better prepare for the VUCA environment								

G. Gap Analysis



H. Financial Ratios

			Financia	I Da	tios Analysis				-	
	Whitehaven (\$AUD)	Gle		_	P (\$AUD)	Yancoal (\$AUD)	ΔIIi	ance (\$USD)	Pe	abody (\$USD)
Sale revenue	\$ 3,844,900,000.00	\$	175,360,000,000.00	\$	83,338,000,000.00	\$ 7,664,000,000.00		2,555,500,000.00	\$	4,946,700,000.00
cogs	\$(1,199,200,000.00)	\$	(160,740,000,000.00)		, con Paris Range	\$ (2,514,000,000.00)	_	1,582,000,000.00	\$	(3,388,400,000.00
less operating expense		\$	-	\$	(54,801,000,000.00)		\$	-	\$	-
less depreciation and ammortization	\$ (258,800,000.00)	\$	(5,310,000,000.00)	\$	(7,885,000,000.00)	\$ (1,014,000,000.00)	\$	268,000,000.00	\$	(321,400,000.00
Net income	\$ 1,143,700,000.00	\$	3,440,000,000.00	\$	10,989,000,000.00	\$ 1,819,000,000.00	\$	582,300,000.00	\$	815,600,000.00
Total assets	\$ 7,607,000,000.00	\$	97,167,000,000.00	\$	152,180,000,000.00	\$11,810,000,000.00	\$ 2	2,788,400,000.00	\$	5,962,000,000.00
Total liability	\$ 2,346,500,000.00	\$	67,173,000,000.00	\$	79,270,000,000.00	\$ 3,368,000,000.00	\$	929,800,000.00	\$	2,355,000,000.00
Previous years assets	\$ 6,239,200,000.00	\$	110,219,000,000.00	\$	138,390,000,000.00	\$13,371,000,000.00	\$ 2	2,728,000,000.00	\$	5,611,000,000.00
Shareholder equity	\$ 5,260,500,000.00	\$	29,994,000,000.00	\$	72,910,000,000.00	\$ 8,442,000,000.00	\$ 1	1,858,600,000.00	\$	3,607,000,000.00
Average total assets	\$ 6,923,100,000.00	\$	103,693,000,000.00	\$	145,285,000,000.00	\$12,590,500,000.00	_	2,758,200,000.00	\$	5,786,500,000.00
operating profit	\$ 2,386,900,000.00	\$	9,310,000,000.00	\$	20,652,000,000.00	\$ 4,136,000,000.00	\$ 4	,405,500,000.00	\$	1,236,900,000.00
ОРМ	62%		5%		25%	54%		172%		25%
ROE	21.74%		11.47%		15.07%	21.55%		31.33%		22.61%
ROA	16.52%		3.32%		7.56%	14.45%		21.11%		14.09%

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GROUP MEETING JOURNAL

Meeting 1 – 28 th March 2024	Brief discussion on the assignment and divided the parts among the group members.	Online, google meet
	Meeting was roughly 10 mins long	
	Contribution – everyone attended the meeting	
Meeting 2 – 15 th April 2024	Discussion the first 3 parts of the assignment	Online, Facebook messenger call
	Checked written content by Andrew on part 1, Aeibel on part 2, William on part 3	
	Meeting was roughly 15 mins long	
	Contribution – everyone attended the meeting and had relevant insights on the matter	
Meeting 3 – 22 nd April 2024	Had a look at the example reports, finalized a structure for our report	Online, Facebook messenger call
	Checked written content for part 4 and 5	
	Part 4 by Manav, part 5 by Mahek	
	Meeting was 20 mins long	
	Contribution – everyone attended the meeting	
Meeting 4 – 7 th May 2024	Rough draft of the report structured and completed	Online, google meet
	Checked and verified written content of each part	
	Part 2 and 3 discussion regarding Excel workings and model. Excel model was finalized.	
	Part 6 to be contributed and solved together on 14 th may 2024 (meeting in person).	
	Meeting was 20-25 mins long	
	Contribution – everyone attended the meeting and every part is	

	solved again and analysed by everyone.	
Meeting 5 – 14 th May 2024	Completed FCF, DCF, and recommendations for the excel and report.	In person, uni library
	All parts completed and verified by everyone	
	Final structure of report and excel left to complete with minor changes	
	Meeting was 3 hours long	
	Contribution – everyone attended the meeting	
Meeting 6 – 22 nd may 2024	Final structuring of report by Mahek and excel was finalized with dataset and values by William.	Online