



Geo Energy Resources Ltd

(GERL SP/RE4.SI)

Stepping up production and securing growth

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- Inorganic growth to expand sales volume.** As of 31 December 2023, Geo Energy owns 73.11% of PT Golden Eagle Energy Tbk, listed on IDX, and it owns 85% of TRA mine. In December 2023, after the acquisition, TRA had its first export shipment of coal valued at around USD3.2mn based on the ASP of approximately USD58.98 per tonne, which was sold at a premium to the Indonesian Coal Index (ICI) price of USD58.05 per tonne at that time, indicating the favourable demand for TRA coal. TRA produces 3,800 kcal/kg gar coal and has 275Mt of 2P coal reserves, leading to a 262% increase in reserves after the acquisition.
- Ongoing exploration and development.** Geo Energy is conducting further exploration on TRA coal mine which is expected to add significant reserves this year. Furthermore, it's 49% owner IPC (other 51% is owned by Bukit Asam, state-owned coal mining company) is also expected to add further reserves in 1Q24.
- We initiate an **OUTPERFORM** recommendation and a target price of S\$0.80 based on a DCF valuation method.

Financials & Key Operating Statistics

YE Dec (US\$)	2021	2022	2023F	2024F	2025F
Revenue	641.9	733.5	536.3	802.3	922.9
Gross Profit	261.2	272.1	83.7	173.2	335.5
PATMI	179.1	163.6	49.4	108.7	223.9
Core PATMI	179.1	163.6	49.4	108.7	223.9
Core EPS (Cents)	12.7	11.5	3.5	7.8	16.1
Core EPS grth (%)	na	na	-69.0	120.2	106.1
Core P/E (x)	2.4	2.6	8.5	3.8	1.9
DPS (SGCents)	9.0	9.0	8.1	8.1	8.1
Div Yield (%)	23.1	23.1	23.1	23.1	23.1
Net Margin (%)	27.9	22.3	9.2	13.5	24.3
Gearing (%)	NC	NC	NC	NC	NC
Price / Book (x)	3.7	3.7	3.6	3.6	3.6
ROE (%)	51.3	40.1	11.1	20.8	32.6

Source: Company Data, KGI Research *Net Cash (NC)

Long life of mine and low operating costs. Geo Energy obtains a strategic advantage stemming from the extensive lifespan and projected coal production of its mines, instilling confidence in long-term clients to engage in supply contracts with the company. Boasting over 351 million tonnes of thermal coal reserves, Geo Energy holds a prominent position in Indonesia. Additionally, its commendably low stripping ratio, approximately 4.8 for a large-scale coal operator, equips Geo Energy with resilience against cyclical fluctuations in volatile coal prices.

Benefiting from Asian developing countries. Coal demand in the Americas and Europe experienced a temporary rise in the past year amid concerns about energy shortage, particularly in thermal coal. However, the availability of alternative energy sources has led to a subsequent decline in demand from these regions - a trend expected to persist. Conversely, emerging nations like India are anticipated to counterbalance this decline, emerging as significant coal consumers and potentially rivalling China, the current leading importer. China

Outperform - Initiation		Performance (Absolute)	
Price as of 25 Jan 24 (SGD)	0.34	1 Month (%)	0.0
12M TP (\$)	0.80	3 Month (%)	17.1
Previous TP (\$)	-	12 Month (%)	22.0
Upside, incl div (%)	161.9		
Trading data		Perf. vs STI Index (Red)	
Mkt Cap (\$mn)	466		
Issued Shares (mn)	1,390		
Vol - 3M Daily avg (mn)	4.9		
Val - 3M Daily avg (\$mn)	1.5		
Free Float (%)	52.9%		
Major Shareholders		Previous Recommendations	
Melati Charles Antonny	18.2%		
Master Resources Ltd	15.7%		
Heah Theare Haw	7.3%		

remains the top global importer and producer of coal, driven by its reliance on coal power for sustained growth. In Asia, South Korea has shifted to increased coal imports from Indonesia due to cost advantages over previous imports from Australia.

Coal power plants are still growing. Despite the recent COP28 discussions on energy generation, the construction of coal power plants persists globally. The affordability of thermal coal as a key resource for heat and energy generation assures its sustained demand over the next decade, undeterred by evolving energy conversations.

Demand surge in extreme weather conditions. The global energy landscape has been experiencing heightened demand fluctuations due to increasingly frequent occurrences of extreme weather events such as El Niño and La Niña. Coal demand surges during both extreme cold and hot weather conditions. This heightened and more unpredictable demand scenario highlights the broader impact of climate variability on energy consumption. Geo Energy is well positioned to capitalise on these fluctuations, ensuring a robust response to the challenges posed by extreme weather conditions and reinforcing its adaptability in the face of evolving environmental dynamics.

Upbeat outlook after the acquisition. The recent EGM voting approved the acquisition of two promising companies, significantly expanding the group's mining portfolio. The newly acquired mine boasts an estimated 275 million tonnes of reserves. Within 5-6 years, Geo Energy will scale up its production to up to 25 million tonnes from the current 8-10 million tonnes, implying a CAGR of 18.6%. The strategic move aligns with the robust demand for TRA coal, primarily fuelled by China and Korea. Despite challenges such as the Monsoon season impacting mining activities, the group anticipates sustained profitability, emphasizing the strategic imperative for acquiring additional mines.

Valuation & Action: We initiate an **OUTPERFORM** recommendation with a TP of S\$0.80, based on a DCF valuation method with a WACC of 13.5%.

Risks: Coal prices are susceptible to global demand and supply fluctuations. The shifting energy landscape might pose long-term challenges for the coal industry. Weather uncertainties and execution risks may also impact production.

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Company Background

Geo Energy Group, founded in 2008 as a coal mining service provider, has successfully transformed into a low-cost producer of high-quality fuel. Listed on the Singapore Stock Exchange since 2012, it is part of the prestigious Singapore FTSE index. The pivotal shift to coal production in 2016, coupled with strategic partnerships, has enhanced efficiency, reduced costs, and positioned Geo Energy as a reliable source of high-quality coal in Southeast Asia.

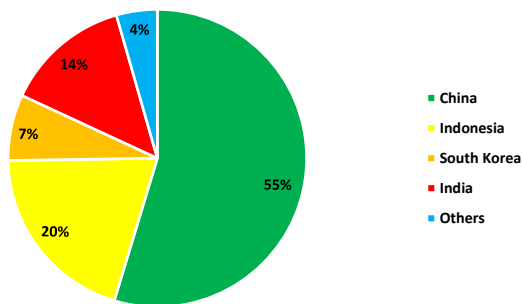
Geo Energy owns strategically located mining concessions in Kalimantan, Indonesia—BEK, SDJ, TBR, and STT. The SDJ and TBR mines are particularly noteworthy for their favourable logistics and production of high-calorific value coal, ensuring consistent energy output. With BEK contributing to the production chain and STT holding significant potential, Geo Energy continues to evolve and optimize its operations.

Geo Energy adapts to the evolving market landscape by diversifying its buyer base and securing long-term contracts, providing stability and revenue streams. The company explores adjustments in coal specifications to cater to specific market demands, fostering broader market reach and revenue opportunities.

With a target of 8 million tonnes for the current year, Geo Energy aims for a gradual ramp-up to around 10 million tonnes next year. Achieving its high-profit target of 25 million tonnes is a 5-6 year projection, emphasizing a long-term growth vision. Operational efficiency optimization across existing and potential new mines remains crucial for reaching ambitious production targets.

Geo Energy's meticulous planning, market diversification, and operational focus position drive the company for sustained growth and profitability, making upcoming developments and operational updates essential for investors.

Figure 1: FY22 Revenue Breakdown by Country



Source: Company data, KGI Research

Figure 2: Coal mines under Geo Energy Group

Wholly owned subsidiaries	Mining permit	Total concession area	Coal mining timeline
PT Sungai Danau Jaya (SDJ)	Extended to May 2027	235 ha	In operation
PT Tanah Bumbu Resources (TBR)	Extended to Jan 2028	489 ha	In operation
PT Bumi Enggang Khatulistiwa (BEK)	Valid until Apr 2031	4,570 ha	In operation (February 2012, underwent maintenance in September 2014, and resumed operations in late 2017)
PT Surya Tambang Tolindo (STT)	Valid until Oct 2032	4,600 ha	Undergoing development (Coal mining concession area is currently underdeveloped)

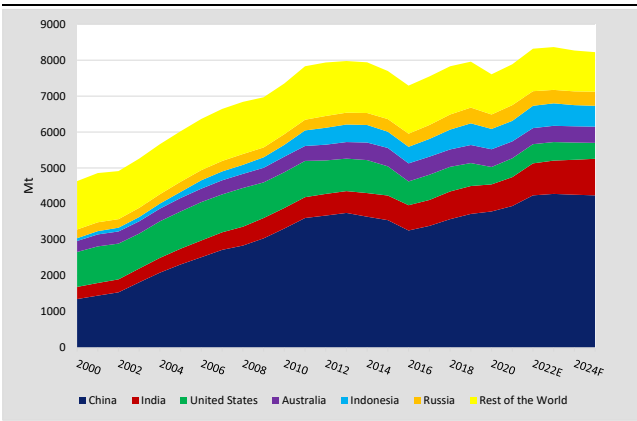
Source: Company data, KGI Research

Macro and Industry Outlook

Coal Market Overview

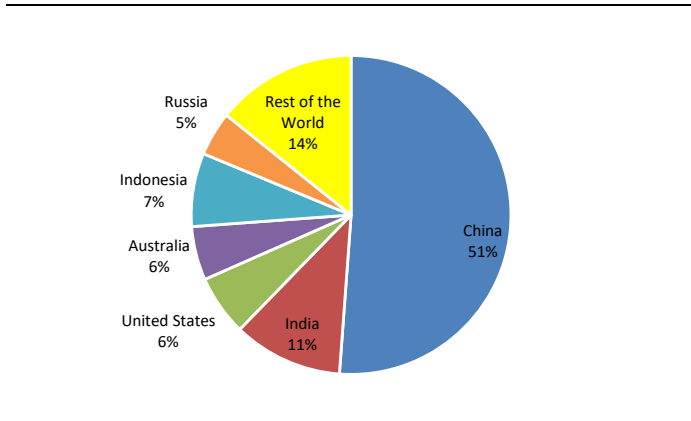
The International Energy Agency's (IEA) latest coal market report forecasts a decline in global coal demand from its 2023 peak to 2026, the first such projection over the report's period. Although 2023 saw global coal demand rise to 8.5 billion tonnes, a 1.4% increase, the IEA predicts a 2.3% decline by 2026. This shift is attributed to a significant expansion of renewable energy capacity, notably in China, where more than half of the global increase is expected. The report underscores the impact of structural changes, clean energy deployment, and weather conditions on China's coal outlook, emphasizing the need for greater efforts to meet international climate targets. The accelerating shift in coal demand and production to Asia, particularly China, India, and Southeast Asia, is highlighted, shaping global coal trends, and reinforcing Asia's ongoing importance in the coal market.

Figure 3: Global Coal Production and Forecasts



Source: [International Energy Agency \(IEA\)](#), KGI Research

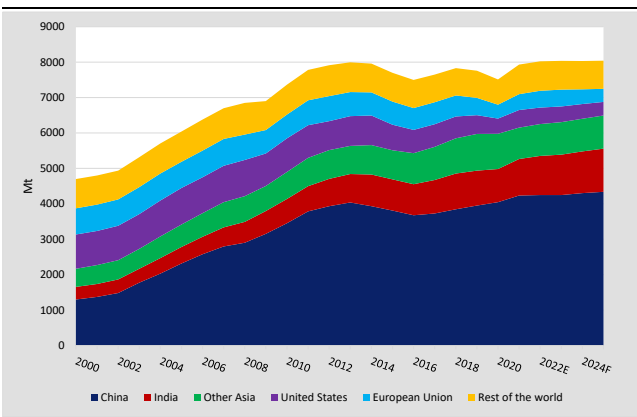
Figure 4: Global Coal Production 2023 Forecasts



Source: [International Energy Agency \(IEA\)](#), KGI Research

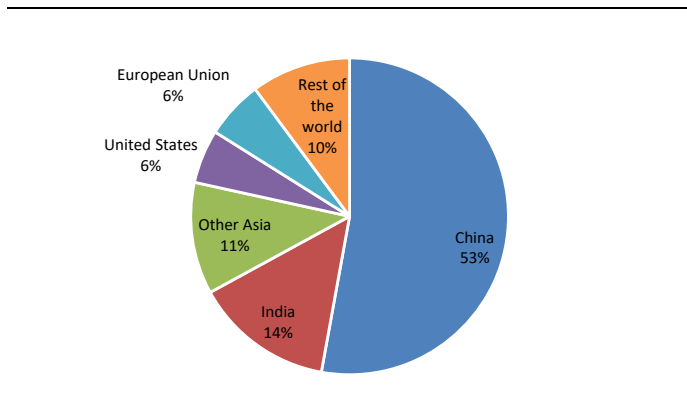
China and India, the world's largest consumers of coal, are unlikely to reduce their reliance on fossil fuel despite ambitious renewable energy targets. Both countries, with rapidly growing economies, are major consumers of coal to fuel their economic growth. China's share of global electricity consumption, 60% generated by coal, is projected to increase to one-third by 2025. India, with 75% of its power derived from coal-fired plants, aims to meet 50% of its electricity demand from renewables by 2030. Despite their renewable goals, both countries are expected to continue relying on coal due to the lack of reliability of renewables and ongoing economic growth.

Figure 5: Global Coal Consumption and Forecasts



Source: [International Energy Agency \(IEA\)](#), KGI Research

Figure 6: Global Coal Consumption 2023 Forecasts

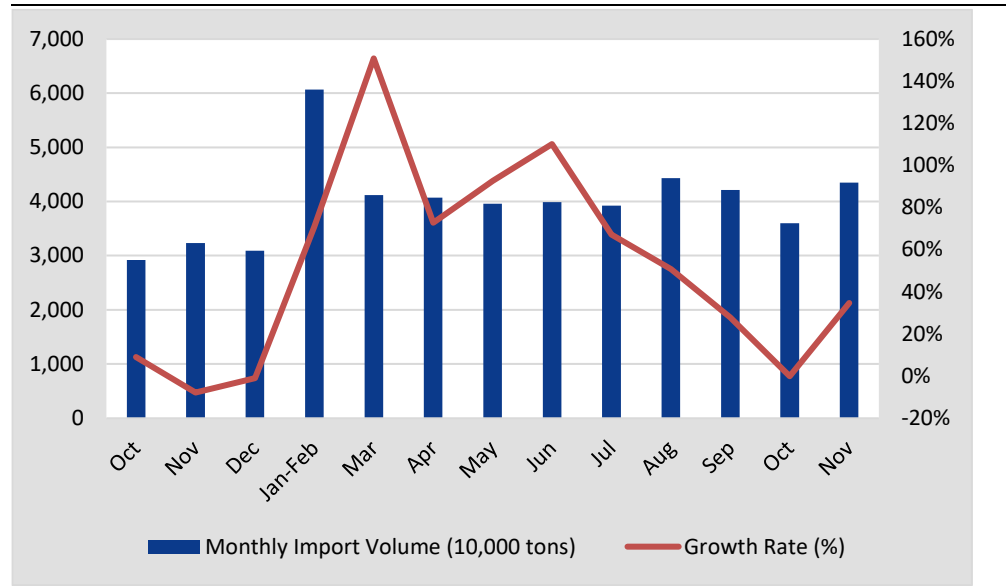


Source: [International Energy Agency \(IEA\)](#), KGI Research

China coal import. China's coal imports hit a record high in 2023, surging by 61.8% to 474.42 million metric tons, as demand rebounded post-COVID-19 and users sought imports due to rising domestic coal prices and diminished quality. This figure surpassed analysts' expectations of 460 million-470 million tons for the year. December marked an all-time monthly high with 47.3 million tons, driven by a severe cold wave and pre-Lunar New Year

stocking. Despite recent reinstated coal import tariffs, traders believe the price advantage of imported coal will persist, possibly leading to increased imports in 2024. Mongolia's coal imports are expected to rise, aided by improved infrastructure links.

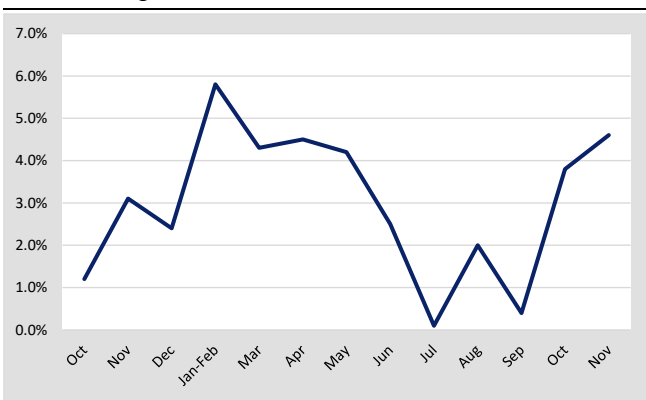
Figure 7: China Monthly Coal Imports



Source: [National Bureau of Statistics of China](#), KGI Research

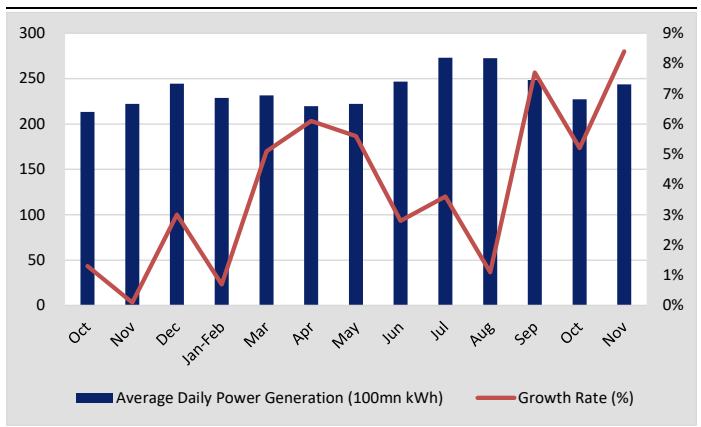
China coal output. China achieved a record-high coal output in 2023, mining 4.66 billion metric tons, marking a 2.9% increase from the previous year, according to the National Bureau of Statistics. December's output stood at 414.31 million tons, nearly consistent with November and up 1.9% year-on-year. Daily output in December averaged 13.36 million tons, slightly lower than the record set in November. Despite the dominance of coal-fired plants in overall power generation, which increased by 8% in December, the growth rate has slowed, with analysts predicting a modest increase in coal production in 2024. Safety-related mining suspensions resulted in flat domestic production growth in 2023, leading to record-high coal imports of 474.42 million tons as users sought alternatives due to rising prices and declining domestic coal quality.

Figure 8: China's Monthly Growth Rate of Raw Coal Output of Industries above the Designated Size



Source: [National Bureau of Statistics of China](#), KGI Research

Figure 9: China's Industrial Power Generation

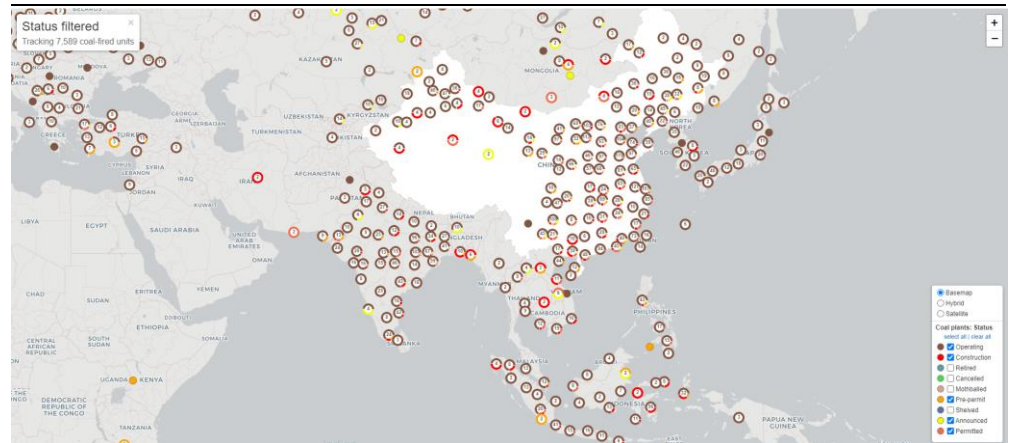


Source: [National Bureau of Statistics of China](#), KGI Research

The demand for coal in Asia, driven by China's winter energy needs, reached a record high in December, resulting in all-time high seaborne thermal coal imports. Both major exporters, Indonesia and Australia, increased shipments, preventing significant price surges. China dominated the demand, importing record amounts despite a rise in domestic production. Conversely, India, the second-largest importer, reduced purchases, contributing to price stability. Prices of both lower and premium coal grades fell, influenced by weaker demand from Japan and South Korea. The first quarter outlook remains uncertain, dependent on China's import strategy and the adoption of non-fossil fuel options. The overall trend

highlights robust Asian demand, a balanced supply, muted prices, and an unpredictable future for Asian thermal coal.

Figure 10: Global Coal Plant Tracker – Highlighted - China



Source: [Global Energy Monitor](#)

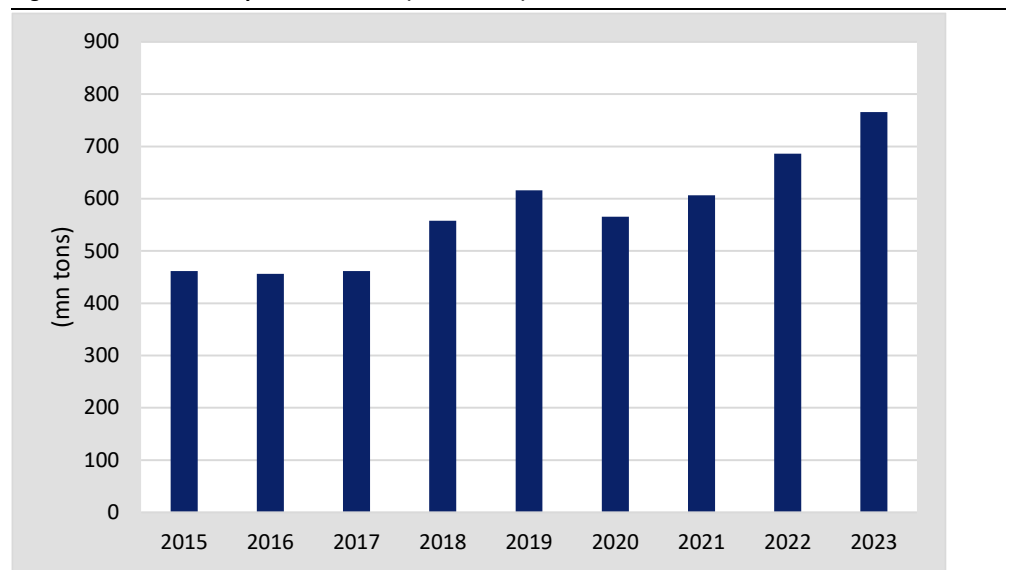
China is boosting coal and gas consumption to address a surge in winter power demand and prevent shortages experienced in the previous year. The National Energy Administration forecasts a potential 12.1% increase in peak power demand. Although the overall winter supply is guaranteed, there could be shortages in Yunnan and Inner Mongolia. To mitigate this, China is intensifying coal production and encouraging natural gas suppliers to enhance stockpiles. Despite ongoing investments in renewable energy, China maintains a substantial reliance on coal, approving the construction of over 50 GW of new coal power in the first half of 2023.

China's push for high coal output to meet demand and prevent blackouts has led to increased accidents, impacting production. There are expected output cuts, particularly in metallurgical coal for steel, following the incident. Coal prices may see near-term upside due to restricted output. With the recent government announcement of a three-year safety campaign, it is anticipated continued safety inspections and output restrictions nationwide through March.

Indonesia Coal Market

Indonesia is one of the major coal producers and exporters. Its coal reserves primarily contain medium grade (between 5,100 and 6,100 cal/g) and low grade (below 5,100 cal/g).

Figure 11: Indonesia Yearly Coal Production (Million Tons)

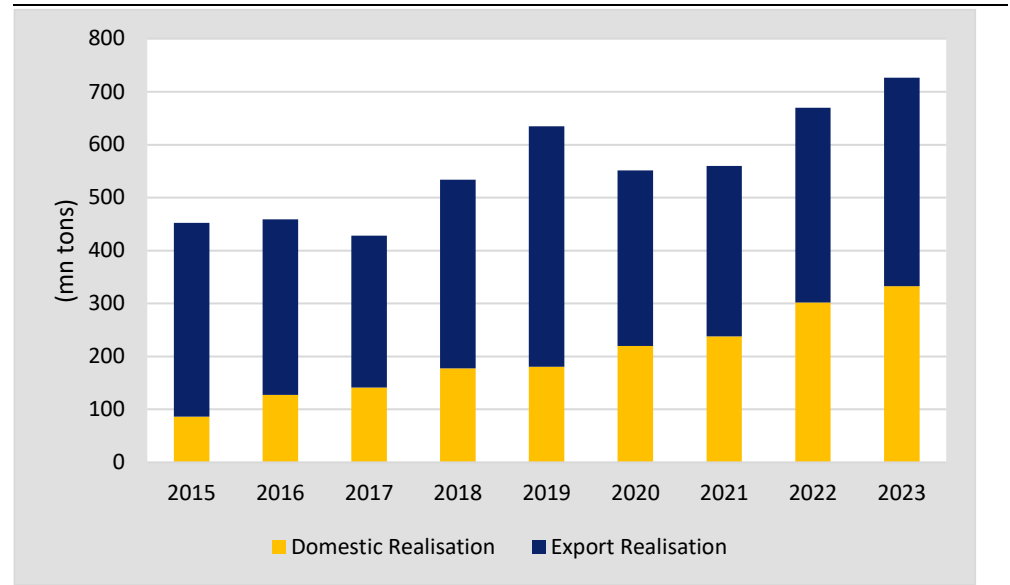


Source: [Ministry of Energy and Mineral Resources](#), KGI Research

According to the mining minister, Indonesia, one of the major exporters of thermal coal, plans to produce 710 million tonnes of coal in 2024. In 2023, the country recorded a record

output of 775 million tonnes of coal, surpassing the target of 694 million tonnes. The increased coal exports in 2023, reaching 508 million tonnes, were attributed to rising energy demand and disruptions in alternative energy sources, particularly gas, due to the Ukraine war. Domestic demand also surged as power demand recovered from the pandemic impact. Despite the commitment to shift away from coal, which constitutes half of Indonesia's energy mix, the government plans to raise the share of renewable energy to 23% by 2025. However, as of last year, only 13% of the country's energy mix was represented by renewables. The mining minister emphasized the commitment to optimize renewable resources while acknowledging the need to be realistic. In the transport fuel sector, Indonesia estimates a slight increase in biodiesel consumption from palm oil in 2024.

Figure 12: Indonesia Yearly Coal Domestic Consumption and Export



Source: [Ministry of Energy and Mineral Resources](#), KGI Research

Investment thesis

Strategic Acquisition Boosts Geo Energy's Long-Term Value. Geo Energy's recent strategic acquisition of GEE and MBJ positions the company for significant long-term growth and value creation. The move secures 275 million tonnes of high-quality coal reserves, extending mine life by 10-15 years and allowing for a production capacity of up to 25 million tonnes per annum. The acquisition is accretive based on independent valuation and strong future cash flow prospects. Valuation and pricing considerations include an arm's length negotiation, recognition of market prices, and potential cost savings. Profitability and cash flow projections indicate expected cash profits per tonne at different coal prices, with a targeted cash cost of 25-30 USD per tonne and a projected cash profit of 20 USD per tonne at a 55 USD per tonne coal price. Market dynamics highlight the high demand and limited new supply for TRA mine coal, aligning with the shifting trend toward higher-quality coal in the thermal coal market. The acquisition enhances profitability through premium coal quality, cost optimization, and operational synergies. Geo Energy commits to at least a 30% dividend payout, providing consistent income for investors. The company's focus on diversification and high-quality coal ensures resilience in a changing energy landscape, strengthening its competitive position and offering attractive returns for long-term investors. The acquisition, supported by independent valuation and robust cash flow prospects, reflects Geo Energy's commitment to maximizing shareholder value through a balanced approach of dividends, buybacks, and long-term growth investments. This presents a clear opportunity for Geo Energy to leverage its financial strength and expertise to acquire existing mines, expanding its production capacity and solidifying its market position in the long run.

Figure 13: Newly acquired mine - TRA

Subsidiary	% owned	Mining permit	Total concession area	Coal mining timeline
PT Golden Eagle Energy Tbk - PT Triaryani (TRA)	85%	Valid until May 2030	2,143 ha	In operation

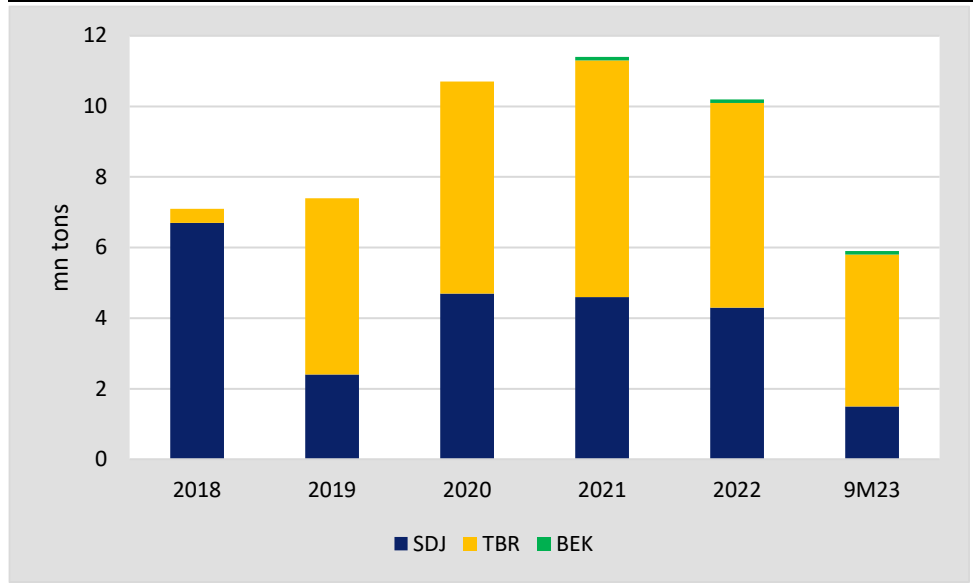
Source: Company data, KGI Research

Low strip ratio. Most of the mines owned by Geo Energy have low strip ratios, meaning that there is a lower amount of waste material to move, hence, resulting in an overall lower mining cost for the company.

The average life-of-mine strip ratio of all mines under Geo Energy is 4.8. Based on the company's track record in the last five years, the ramp-up in production has not affected the cash cost substantially. The key reason for the low cash cost is due to:

- 1) Low life-of-mine (LOM) strip ratio.
- 2) Minimise waste haul distance and out-of-pit waste haulage to minimise mining costs through mutual mining agreements between SDJ, TBR and the neighbour, AJE to define coordinated mining and dumping activities necessary. The reduction in distance results in lower logistics cost.
- 3) Lower oil costs improve profit margins.

As average selling price (ASP) moves cyclically and swings with international coal prices, low cash cost enhances the profitability during the upturn of the cycle when coal prices surge, while also buffering the impact during cyclical downturn when ASP decreases. In a long-term perspective, low strip ratio is an advantage for sustainable growth in profit margins.

Figure 14: Coal production breakdown by mining projects from 2018 to 9M23


Source: Company data, KGI Research

Strong balance sheet. The surge in coal prices, higher than anticipated over the past two years, has left coal producers with substantial cash reserves. Despite consumers grappling with increased energy bills, regulatory measures and subsidies in some countries, especially in the electricity sector, have supported coal producers. This financial strength has enabled coal mining companies to pay off debts, increase dividends and buybacks, and retain cash. Diversified miners are redirecting coal profits to other commodities in anticipation of growing demand tied to the energy transition. As pure coal players face challenges in regulatory approvals and public pushback against new projects, they are opting to acquire existing mines. Despite the global push toward clean energy, the demand for coal remains strong, supported by a balanced supply and demand dynamic. Furthermore, these other factors enable Geo Energy to continue to build its value in the long-run:

- 1) Tailwinds from a Weakening USD. Geo Energy's fortunes are intricately linked to the strength of the US dollar. Anticipated interest rate cuts in 2024 could trigger a weakening USD, making coal, which is priced in dollars, more attractive to international buyers.
- 2) Winter Season Demand Surge. The ongoing winter months bring a predictable spike in coal demand as China and India crank up their heating needs.
- 3) Manufacturing Shift Fuels Long-Term Growth. The global manufacturing sector is witnessing a significant shift towards South and Southeast Asia, regions heavily reliant on coal for energy generation.

Geo Energy's robust financial position serves as a safety net, allowing the company to explore strategic acquisitions and investments for further growth in the face of market uncertainties.

Valuations and peer comparison

We initiate Geo Energy with an **OUTPERFORM** recommendation and S\$0.80 price target. We used the discounted cash flow model to determine the target price by deriving the NPV of all the mines, with the expected life and coal production of each mine based on the IQPR report. Currently, Geo Energy owns 4 mines, SDJ, TBR, BEK and STT. Its 73.11% owned subsidiary PT Golden Eagle Energy Tbk (SMMT IJ) also has an 85% ownership of the newly acquired TRA mine. As of the IQPR dated 31 December 2022, STT was still being subjected to exploration drilling and its potential opportunity as a metallurgical coal producer was not yet explored due to the lack of coking property testing. Hence, STT had no material activity reported and has not been factored into our valuation due to the lack of a mine plan and schedule implemented. With an overall WACC of 13.5%, we derive a target price of S\$0.80 with an upside of 140%.

Assumptions:

1. Valuation duration – Due to the mining permits having different validity periods, we assume that there is no extension requested for the various permits. Based on our conservative estimates, we deem the mines to be no longer producing coal when the validity of their mining permits ends.
2. Price trend – Due to anticipated interest rate cuts this year and the demand and supply dynamics for coal expected to remain constant, we assume that coal prices will remain relatively high between 2024 and 2025 before declining in 2026.
3. WACC – 13.5%, factoring in the country risk premium of Indonesia and equity risk premium.

Figure 15: Discounted Cash Flow

(US\$m)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Production (mn tonnes)															
SDP (SDJ +TBR)			8.5	11.0	10.7	11.0	11.2	10.1	1.5						
BEK			0.5	1.0	1.0	1.0	1.0	1.0	1.0						
Total - 4,200 kcal/kg			9.0	12.0	11.7	12.0	12.2	11.1	2.5						
TRA - 3,800 kcal/kg			0.3	1.7	4.1	7.8	9.9	11.8	13.1	14.3					
Average Selling Price (US\$/t) - 4,200															
			59	60	61	60	58	55	54						
Average Selling Price (US\$/t) - 3,800															
			51	52	53	52	50	48	48	48					
Total Revenue (US\$m)	-	-	546	812	933	1,126	1,209	1,177	763	687					
Operating cost (US\$/tonne)															
SDP			51.0	51.0	43.8	41.4	39.2	36.8	37.3						
BEK			22.0	21.0	21.2	24.0	25.7	25.3	26.7						
TRA			26.5	26.7	23.6	23.6	23.6	23.6	23.6	23.6					
Total	-	-	453	629	587	664	700	677	392	338	-	-	-	-	-
EBITDA	-	-	94	183	346	462	508	500	371	349					
Dep & Amt			25	36	38	44	48	47	48	48					
EBIT	-	-	68	148	307	418	460	453	323	301					
EBIT (1-22% tax)	-	-	53	115	240	326	359	353	252	235					
Capex			4	4	4	4	4	4	4	4					
Working capital			(2)	0	11	17	19	19	16	16					
FCF	-	-	51	111	225	305	336	330	232	215					
PV (FCF)	-	-	40	76	135	162	157	136	84	69	-	-	-	-	-
PV (FCF)			859.0												
Plus Net Borrowing (US\$m)			1.1												
FCF to equity (US\$m)			860.2												
FCF to equity (S\$m)			1118.2												
Cost of equity			13.5%												
Equity/share (S\$)*			0.80												

*As of 31 December 2022, from IQPR released on Feb 2023, STT mine had no material activity at the site. Hence, it has not been factored into our valuation.

Source: KGI Research

Peer comparison

Indonesia listed. Indonesia is the world's largest exporter of thermal coal and the third-largest coal producer globally in 2023. According to the MINERBA One Data (MODI) released by the Indonesian government, Indonesia's coal production hit a record high of 775.2Mt, exceeding the target of 694Mt set for 2023. Output rose 12% YoY. Exports also hit a record high or 508Mt with 4Q23 seeing the highest shipments at 143.5Mt. Total exports to China were 215.7Mt and India at 108.4Mt in 2023. Geo Energy Resources Ltd (GERL SP) is focused solely on coal mining in Indonesia.

Looking at coal producers, its Indonesian-based peers include coal-pure play companies like Adaro Energy Indonesia (ADRO IJ), Bukit Asam Tbk PT (PTBA IJ) and Harum Energy Tbk PT. Golden Energy Resources (GEAR SP) which was GERL's only peer listed on the Singapore Stock Exchange (SGX) has been delisted.

Figure 16: Peer Comparison

Bloomberg Ticker	Company Name	Last Price (local \$)	Currency Adj. Market Cap (US\$ m)	Dividend Yield (%)		Net Gearing (%)*	P/E (x)		P/B (x)		YTD Price Performance (%)	1YR Price Performance (%)	1YR Total Returns (%)
				FY22	FY23F		12M	Forward	FY19	FY20F			
GERL.SP	GEO ENERGY RESOURCES LTD	SGD 0.34	348	28.8	-	-56.5	N/A	N/A	0.8	-	-3	1	22
Indonesia													
ADRO.IJ	ADARO ENERGY INDONESIA TBK.P	IDR 2360.00	4,762	13.0	18.8	-39.7	2.5	3.1	1.3	0.7	-0.8	-10.4	-9
PTBA.IJ	BUKITASAM TBK PT	IDR 2570.00	1,868	29.6	26.9	-53.2	4.7	5.8	1.5	1.3	5.3	-10.1	-0.5
HRUM.IJ	HARUM ENERGY TBK PT	IDR 1180.00	1,006	4.5	4.0	-37.1	5.8	5.7	1.9	1.0	-1.1	-10.1	-10.1
Average			2,545	-	16.6	(43.3)	4.3	4.9	1.5	1.0	(2.8)	(12.1)	(12.0)
Median			1,868	-	18.8	(39.7)	4.7	5.7	1.5	1.0	(0.8)	(12.1)	(12.1)

*Negative Net Gearing = net cash position

Source: Bloomberg, KGI Research

Key Risks

Coal prices and the impact of ESG on long-term demand. The cyclical nature of coal prices and the volatility in coal demand could significantly fluctuate, leading to potential adverse impacts on its business and financial stability. The primary drivers of demand are the power sector and industries utilizing thermal coal. While Geo Energy's assets are deemed to be relatively low-cost, a substantial and prolonged decline in coal prices may negatively impact the company's coal reserves estimates, potentially necessitating adjustments to production targets and mine design. Moreover, the increasing emphasis on renewable energy, driven by environmental, social, and governance (ESG) considerations, poses long-term challenges for the coal industry, further heightening uncertainties around future demand dynamics.

Regulatory and execution risks. The expansion plans for Geo Energy's mines and associated infrastructure necessitate numerous government permits and approvals. Delays in securing these approvals pose a substantial risk to the timely execution of production expansion and mine development. Such delays have the potential to lead to project overruns, significantly impacting both capital and operating costs. Successful infrastructure development and production ramp-up are intricate processes requiring meticulous execution and time. Unforeseen challenges or delays in execution may adversely affect timelines and initial returns.

Our coal production forecast relies on the IQPR-provided forecasts for Geo Energy's mines, which are contingent on government approvals and infrastructure development. In the event of challenges or setbacks preventing Geo Energy from obtaining necessary approvals for production expansion, there will be a negative impact on the company's fair value, adding an additional layer of risk to the regulatory and execution landscape.

Weather Woes. Indonesia's monsoon season stands as a natural disruptor, capable of impeding mining activities and transportation due to heavy rains. Although last year experienced favourable weather conditions, future seasons may introduce unwelcome delays. Adverse weather conditions have the potential to hinder production targets and, in turn, lead to missed revenue opportunities. The unpredictable nature of weather-related disruptions adds a layer of uncertainty to Geo Energy's mining capabilities.

Financial Summary

YE 31 Dec

INCOME STATEMENT (US\$)	2021	2022	2023F	2024F	2025F
Revenue	641,888,828.0	733,474,967.0	536,256,592.5	802,280,936.0	922,907,963.0
Cost of sales	(380,656,363.0)	(461,418,818.0)	(452,508,973.0)	(629,048,170.2)	(587,376,994.6)
Gross Profit	261,232,465.0	272,056,149.0	83,747,619.5	173,232,765.8	335,530,968.4
Other income	4,235,055.0	8,347,216.0	4,820,456.3	7,211,771.8	8,296,098.4
General and administrative expenses	(15,254,084.0)	(17,958,123.0)	(12,870,158.2)	(19,254,742.5)	(22,149,791.1)
Other expenses	(11,920,358.0)	(24,548,851.0)	(7,461,258.8)	(11,162,614.7)	(12,840,970.7)
Profit from Operations	238,293,078.0	237,896,391.0	68,236,658.7	150,027,180.4	308,836,305.0
Finance income/(expenses)	(4,206,206.0)	(53,340.0)	(296,945.7)	(423,184.9)	(554,799.6)
Profit before Tax	234,086,872.0	237,843,051.0	67,939,713.0	149,603,995.5	308,281,505.4
Income tax	(55,010,822.0)	(74,256,155.0)	(18,588,586.6)	(40,932,272.1)	(84,347,095.4)
PATMI	179,076,050.0	163,586,896.0	49,351,126.5	108,671,723.4	223,934,410.1

BALANCE SHEET (US\$)	2021	2022	2023F	2024F	2025F
Cash and cash equivalents	190,595,157.0	234,082,769.0	279,979,481.9	380,537,399.7	544,975,408.6
Trade and other receivables	62,403,946.0	61,777,283.0	58,525,265.2	87,558,279.4	100,723,112.9
Inventory	24,128,714.0	30,969,092.0	29,301,178.3	40,732,568.2	38,034,247.0
Other current assets	11,999,171.0	43,921,377.9	65,709,745.4	75,589,540.5	0.0
Current Assets	289,328,952.0	338,828,315.0	411,727,303.3	574,537,992.6	759,322,309.0
Property, plant and equipment	127,482,815.0	115,667,998.0	98,360,487.7	72,467,126.5	42,680,566.6
Other non-current assets	108,529,808.0	107,410,428.2	105,722,601.4	103,777,015.8	0.0
Non-current Assets	236,381,901.0	224,197,806.0	205,770,915.9	178,189,727.9	146,457,582.5
Total assets	525,710,853.0	563,026,121.0	617,498,219.2	752,727,720.5	905,779,891.4
Trade and other payables	115,851,006.0	120,998,414.0	137,677,700.3	191,390,470.9	178,711,845.8
Borrowings (current)	5,151.0	15,533.0	6,519.0	16,512.5	21,509.3
Other current liabilities	14,628,594.0	15,265,197.3	15,641,260.4	16,244,843.3	0.0
Current Liabilities	157,097,153.0	135,642,541.0	152,949,416.6	207,048,243.9	194,978,198.4
Borrowings (non-current)	12,467.0	13,038.0	33,025.0	43,018.5	48,015.3
Other non-current liabilities	-10,391,744.0	-9,911,131.0	-8,496,432.5	-7,422,817.7	0.0
Non-current liabilities	-36,452,202.0	-10,378,706.0	-9,878,106.0	-8,453,414.0	-7,374,802.5
Shareholders equity	116,196,075.0	115,649,915.0	115,649,915.0	115,649,915.0	115,649,915.0
Non-controlling interests	232,910,895.0	292,635,544.0	328,652,590.2	407,962,522.3	571,392,550.7
Total Equity	349,106,970.0	408,285,459.0	444,302,505.2	523,612,437.3	687,042,465.7
Total Liabilities and Equity	525,710,853.0	563,026,121.0	617,498,219.2	752,727,720.5	905,779,891.4

CASH FLOW STATEMENT (US\$)	2021	2022	2023F	2024F	2025F
Net income before tax	234,086,872.0	237,843,051.0	67,939,713.0	149,603,995.5	308,281,505.4
Depreciation & non cash adjustments	23,773,498.0	(47,738,268.0)	4,429,734.6	(6,516,169.2)	(44,688,369.4)
Change in Working Capital	25,310,641.0	63,257,626.0	7,968,651.7	31,969,086.3	50,767,363.3
Income Tax Paid	(12,562,180.0)	(83,524,642.0)	(18,588,586.6)	(40,932,272.1)	(84,347,095.4)
Interest Paid	3,779,860.0	53,340.0	296,945.7	423,184.9	554,799.6
CF from operating activities	274,388,691.0	169,891,107.0	62,046,458.5	134,547,825.4	230,568,203.6
Purchase/Disposal of PPE	(6,139,585.0)	(2,917,709.0)	(4,267,979.4)	(6,385,224.0)	(7,345,275.0)
Other CFI	2,067,422.0	670,395.0	0.0	0.0	0.0
CF from investing activities	(4,072,163.0)	(2,247,314.0)	(4,267,979.4)	(6,385,224.0)	(7,345,275.0)
Dividends Paid	(49,899,096.0)	(101,730,439.0)	(13,334,080.2)	(29,361,791.4)	(60,504,381.6)
Debt Raised / (Repaid)	(81,579,486.0)	(426,060.0)	1,452,314.0	1,757,107.8	1,719,462.0
Equity Raised / (Bought Back)	752,709.0	(2,622,283.0)	0.0	0.0	0.0
Other Cash from Financing	(1,579,313.0)	(14,869,388.0)	0.0	0.0	0.0
CF from financing activities	(132,305,186.0)	(119,648,170.0)	(11,881,766.3)	(27,604,683.6)	(58,784,919.7)
Net increase in cash & cash equiv.	138,011,342.0	47,995,623.0	45,896,712.9	100,557,917.8	164,438,009.0
FX effects	(78,478.0)	(1,613,745.0)	0.0	0.0	0.0
Beginning Cash	47,662,057.0	185,594,921.0	234,082,769.0	279,979,481.9	380,537,399.7
Ending Cash	185,594,921.0	231,976,799.0	279,979,481.9	380,537,399.7	544,975,408.6

KEY RATIOS	2021	2022	2023F	2024F	2025F
Profitability					
Core EPS	12.7	11.5	3.5	7.8	16.1
Core EPS Growth (%)	86.7	(9.5)	(69.0)	120.2	106.1
DPS (SGD Cents)	9.0	9.0	8.1	8.1	8.1
Dividend Yield (%)	23.1	23.1	23.1	23.1	23.1
Profitability					
EBITDA margin	33.6%	29.8%	7.8%	14.1%	28.9%
Net margin	27.9%	22.3%	9.2%	13.5%	24.3%
ROE	51.3%	40.1%	11.1%	20.8%	32.6%
ROA	34.1%	29.1%	8.0%	14.4%	24.7%
Financial Structure (x)					
Total Debt/Equity	0.5	0.4	0.4	0.4	0.3
Net Gearing	0.0	-0.2	-0.2	-0.3	-0.5

Market Valuation (x)	2021	2022	2023F	2024F	2025F
Price / Earnings	2.4	2.6	8.5	3.8	1.9
Price / Book	3.7	3.7	3.6	3.6	3.6
Price / Sales	0.7	0.6	0.8	0.5	0.5
EV / EBITDA	0.9	0.9	4.9	1.8	0.8

Appendix

As of December 2023, Geo Energy Resources owns 73.11% of PT Golden Eagle Energy Tbk, listed on IDX. PT Golden Eagle Energy owns 85% of TRA.

The following data is from TRA's IQPR dated 24 August 2023 and SDP and BEK's IQPR as of 31 December 2022.

Figure 17: Total Marketable Reserves

Description	Total Waste (Mbcm)	Total Coal (Mt)	Strip Ratio (bcm/t)	Proved Coal (Mt)	Probable Coal (Mt)	Proved + Probable Coal (Mt)
SDJ Marketable Coal Reserves	71.5	12.8	5.6	5.6	4.2	12.8
TBR Marketable Coal Reserves	227.0	50.9	4.5	34.8	16.1	50.9
SDP Marketable Coal Reserves (SDJ + TBR)	298.5	63.7	4.7	40.4	20.3	63.7
BEK Marketable Coal Reserves	91.6	13.9	6.6	9.4	2.8	12.2
Malam Marketable Coal Reserves	1,263.0	265.0	4.8	100.0	165.0	265.0
Betung Marketable Coal Reserves	49.0	10.0	4.9	7.0	3.0	10.0
TRA Marketable Coal Reserves	1,312.0	275.0	4.8	107.0	168.0	275.0
Total Marketable Coal Reserves	1,702.1	352.6	4.8	156.8	191.1	350.9

Source: Company data, KGI Research

Figure 18: Total Coal Resources

Description	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)
SDJ Coal Resources	10.7	6.7	4.2	21.7
TBR Coal Resources	40.6	21.0	4.8	66.0
SDP Coal Resources (SDJ + TBR)	51.3	27.7	9.0	87.7
BEK Coal Resources	14.2	5.9	7.2	27.3
Malam Coal Resources	102.0	234.0	36.0	372.0
Betung Coal Resources	9.0	7.0	0.0	16.0
TRA Coal Resources	111.0	241.0	36.0	388.0
Total Coal Resources	176.5	274.6	52.2	503.0

Source: Company data, KGI Research

Figure 19: TRA Life of Mine Schedule

Year	Waste Volume (Mbcm)	Coal (Mt)	Stripping Ratio (bcm/t)
2023	10.0	2.5	4.0
2024	11.2	2.8	4.0
2025	26.4	6.6	4.0
2026	56.3	12.5	4.5
2027	80.0	16.0	5.0
2028	104.5	19.0	5.5
2029	115.5	21.0	5.5
2030	126.5	23.0	5.5
2031	137.4	25.0	5.5
2032	125.0	25.0	5.0
2033	120.9	25.0	4.8
2034	112.5	25.0	4.5
2035	100.0	25.0	4.0
2036	100.0	25.0	4.0
2037	86.1	21.5	4.0
Total 2044	1312.3	274.9	4.8

Source: Company data, KGI Research

Figure 20: SDP (SDJ + TBR) Life of Mine Schedule

Year	SDP (SDJ + TBR)			SDJ			TBR		
	Waste Volume (Mbcm)	Coal (Mt)	Stripping Ratio (bcm/t)	Waste Volume (Mbcm)	Coal (Mt)	Stripping Ratio (bcm/t)	Waste Volume (Mbcm)	Coal (Mt)	Stripping Ratio (bcm/t)
2023	51.4	10.0	5.1	16.2	3.0	5.4	35.2	7.0	5.0
2024	54.3	11.0	4.9	16.3	2.5	6.5	38.0	8.5	4.5
2025	54.0	10.7	5.0	16.1	2.7	6.0	37.9	8.0	4.7
2026	52.4	11.0	4.8	16.0	2.5	6.4	36.3	8.5	4.3
2027	45.5	11.2	4.1	7.7	3.2	2.4	37.8	8.0	4.7
2028	37.8	10.1	3.7				37.8	10.1	3.7
2029	5.6	1.5	3.7				5.6	1.5	3.6
Total	301.1	65.5	4.6	72.4	13.9	5.2	228.7	51.6	4.4

Source: Company Data, KGI Research

Figure 21: BEK Life of Mine Schedule

Year	Waste Volume (Mbcm)	Coal (Mt)	Stripping Ratio (bcm/t)
2023	2.6	0.5	5.2
2024	5.3	1.0	5.2
2025	4.8	1.0	4.6
2026	5.7	1.0	5.5
2027	7.1	1.0	6.9
2028	8.0	1.0	7.7
2029	7.7	1.0	7.5
2030	8.4	1.0	8.1
2031	5.8	1.0	5.7
2032	6.6	1.0	6.4
2033	6.5	1.0	6.3
2034	7.2	1.0	6.9
2035	7.7	1.0	7.5
2036	8.3	1.0	8.1
Total	91.6	13.9	6.6

Source: Company Data, KGI Research

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