

Indonesia's coal companies: Some diversify, others expand capacity

While some Indonesian coal companies are limiting new coal capacity and investing in non-coal businesses, others are gearing up for expansions

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Key Findings

Indonesian coal companies earned record profits in 2022, followed by healthy results in 2023. Five of the seven companies analyzed have opted to invest in non-coal businesses; two are acquiring or building more capacity.

Bayan Resources and Geo Energy could boost coal capacity by a combined 58 million tonnes (mt). Adaro is investing in aluminum and renewables along with up to 2.2 gigawatts (GW) of coal capacity. PTBA has just commissioned its 1.32GW coal power plant.

The expansion of coal capacity can support up to 21GW of planned captive coal power, potentially adding 53mt of CO₂ emissions and threatening Indonesia's ability to meet its decarbonization targets under the Paris Agreement.





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Executive Summary

Indonesian coal producers saw record profits in 2022 and continued to see strong earnings in 2023, driven by surging global coal prices following international restrictions on imports of coal from Russia due to its invasion of Ukraine. IEEFA examined the figures of seven major listed Indonesian coal producers that have disclosed financial and production data to understand how these profits are being deployed.

Together, the seven companies produced a total of 217 million tonnes (mt) of output in 2023, accounting for an estimated 27% of Indonesia's total coal production of 775.2mt.¹ These companies – Adaro Energy, Bayan Resources, Geo Energy Resources, Harum Energy, Indika Energy, Indo Tambangraya Megah (ITMG) and PT Bukit Asam Tbk (PTBA) – reported record profits of US\$8.4 billion in 2022 and a robust US\$4.4 billion for 2023.

After record profits, coal capacity expansion looms large

- The seven Indonesian coal companies analyzed by IEEFA represented 27% of Indonesia's coal production in 2023 with sales of 217 million tonnes in that year.
- Although only two of the seven companies have major coal expansion plans, the anticipated addition of 58mt of capacity could support up to 21GW of planned coal-fired capacity. This would risk increasing Indonesia's carbon emissions by nearly 53mt per year.

IEEFA's analysis finds that five of the seven companies are investing in diversification into non-coal businesses, such as aluminum (Adaro) and nickel smelting (Harum Energy). Meanwhile, Bayan Resources and Geo Energy Resources have plans to expand their coal operations by up to 58mt, which would add the equivalent of 27% to the seven companies' combined 2023 sales of 217mt.

¹ Global Energy. <u>Indonesia's coal exports reach all-time high</u>. February 2024.





Bayan has secured a US\$200 million loan from Bank Permata and US\$200 million from Bank Mandiri.² The company plans to increase capacity to 80mt³ from its 2023 output of 48mt.⁴

Geo Energy is acquiring a coal capacity of 25mt for US\$200 million.⁵ The company has secured a US\$220 million loan from Bank Mandiri.^{6, 7}

The expansion of 58mt of coal output could support 21 gigawatts (GW) of planned captive coal plants, potentially adding 53mt⁸ of CO₂ emissions to Indonesia's total. While these companies are making some renewable energy investments, their metal smelting and coal expansion investments will contribute to the development of captive coal plants.

Due to their carbon intensity, captive coal plants operated by industrial consumers could hinder the climate commitments outlined in the US\$20 billion Just Energy Transition Partnership (JETP). The Government of Indonesia, through its Nationally Determined Contributions under the Paris Agreement, has committed to reducing CO₂ emissions by 32% unconditionally by 2030.⁹ It is unclear how these new private sector investments in coal will help the country achieve its legally binding goals in time.



Source: Company reports and IEEFA estimates. "LT" stands for "Long-term."

² PT Bayan Resources Tbk. Financial Statements to 31 December 2022 and 2023.

³ PT Bayan Resources Tbk. Investor Update Third Quarter 2023.

⁴ PT Bayan Resources Tbk. <u>2024 Guidance</u>.

⁵ Geo Energy Resources. <u>Media Release</u>. 26 July 2023.

⁶ Geo Energy Resources. <u>SGX Announcement</u>. 26 July 2023.

⁷ The Edge Singapore. Geo Energy confirms US\$220 mil term loan from Bank Mandiri. 24 September 2023.

⁸ IEEFA. <u>The coal cost of aluminum.</u> 11 October 2023.

⁹ Republic of Indonesia. Enhanced Nationally Determined Contribution of the Republic of Indonesia. September 2022.

Indonesian Coal: Record Profits in 2022, Still High in 2023

Output Hits New High in 2023

The seven Indonesian companies highlighted in this report enjoyed record revenue and gross profits in 2022 due to high coal prices. Together, these companies accounted for 202mt of coal sales in the same year. Indonesia's total coal production in 2022 was 687mt, with exports totaling 494mt, and domestic consumption at 177mt.¹⁰ In 2023, Indonesian coal production rose to 775mt¹¹, with exports reaching a record 504.6mt.¹²

Within this group, the largest company by sales volume in 2023 was Adaro with 66mt, followed by Bayan Resources with 47mt. The seven companies had a total coal sales volume of around 217mt in 2023. IEEFA estimates that these seven companies accounted for 29% of Indonesia's coal output in 2022 and 27% in 2023.



Figure 2: Selected Indonesian Coal Companies' Coal Sales Volume FY2021-2023 (million tonnes, %)

Source: Company reports and IEEFA estimates.

Coal prices rose in 2022 following Russia's invasion of Ukraine, which disrupted Russian coal and natural gas supplies to Western and global markets. This occurred during a period of increasing energy demand as economies were reopening post-COVID-19.



¹⁰ Reuters. <u>Coal miners group expects Indonesia's 2023 coal output to surpass target</u>. 29 November 2023.

¹¹ Enerdata. Indonesia's coal production rises in 2023, while oil and gas output remains stable. 19 January 2024.

¹² Reuters. Indonesian thermal coal exports scale new highs in early 2024. 20 February 2024.

Coal prices fell during FY2023 as new supply entered the market and demand slowed. However, prices in FY2023 were still high enough for coal companies to enjoy higher profits than in FY2021, and more than half of the record levels seen in 2022.

The average coal price across this group was US\$118/tonne in 2022, which was 61% higher yearon-year. In 2023, the average coal price decreased by 28% to US\$85/tonne, although this was still above the 2021 price. As a result of the increase in coal prices, these coal companies reported record levels of revenue and gross profits in 2022. Despite declines in 2023, the levels of revenue and gross profits remained above those in 2021.





Source: Company annual reports and quarterly statement filings.

Due to coal prices rising more than costs, these companies enjoyed total gross profits of US\$12 billion in 2022, with an average gross margin of 49%. In 2023, this gross margin declined to 35%, primarily due to the drop in coal prices, but gross profits were still approximately 50% of the record levels seen in 2022.

The total net profit for the seven coal companies rose 1.2 times year-on-year to US\$8.4 billion in 2022. In 2023, although net profit declined by 49% year-on-year, it remained high at US\$4.3 billion. By comparison, the combined FY2021 net profit for the seven coal companies was only US\$3.8 billion.









Source: Company public financial reports and quarterly statement filings.

Cash Used to Fund Coal Expansion

Coal Capacity Expansion Will Support Captive Plants

The two largest global mining companies, BHP and Rio Tinto, paid out 77% and 64% of their earnings, respectively, in dividends for the year ended 30 June 2022; and 64% and 71% respectively for the year ended 30 June 2023.¹³ For the year ended 2022, IEEFA estimates that the seven Indonesian coal companies analyzed paid out 55% of their profits. However, in 2023, the combined capital expenditure (capex) for the seven coal companies increased by 58% year-on-year, from US\$829 million to US\$1.31 billion.

For some coal companies, the use of high profits and cash to fund coal expansion will support the development of captive coal plants to power nickel smelters. IEEFA believes captive coal plants are a major driver of future Indonesian coal demand. This contradicts nationally approved plans to decarbonize the country's energy sector.

According to Bloomberg, Indonesia's captive power capacity is already 13GW.¹⁴ This accounts for 32% of Indonesian coal-fired capacity in 2023, estimated at 40.7GW by Statista.¹⁵ Bloomberg reports that there is another 21GW of captive power in the pipeline, with nearly half under



¹³ BHP. Annual Report 2023; Rio Tinto. Annual Report 2023.

¹⁴ Bloomberg UK. <u>Money and Politics Put World's Biggest Climate Deal at Risk</u>. 04 September 2023.

¹⁵ Statista. <u>Capacity of operating coal power plants in Indonesia from 2018 to 2023</u>. 05 October 2023.

construction. Using the Statista calculation of 40.7GW for Indonesia's coal-fired power capacity; IEEFA estimates that when the additional 21GW (calculated by Bloomberg) is fully completed, this could add a staggering 52% to 2023 coal power capacity.

Using an estimated 1.6mt of annual coal demand per GW, this 21GW of proposed capacity could boost coal demand by nearly 34mt, which is equivalent to 17% of Indonesia's 2022 coal demand of 198.5mt.

Category	Unit	Coal Power Capacity	Coal usage
Indonesia 2023	GW	40.7	
Including captive	GW	13.0	
Indonesia 2022	m tonnes		198.5
Current CO ₂ emissions	m tonnes per year	309 Mt CO ₂ per ye	ar
Captive in construction	MW	10,000	
As % of total capacity	%	24.7	
Potential coal demand	m tonnes		16.0
As a % of 2022 coal use	%		8.1
Incremental CO ₂ emissions	m tonnes per year	25 Mt CO ₂ per yea	ır
Captive to come	MW	11,000	
As % of total capacity	%	27.2	
Potential coal demand	m tonnes		17.6
As a % of 2022 coal use	%		8.9
Incremental CO ₂ emissions	m tonnes per year	27.5 Mt CO ₂ per ye	ar

Table 1: 2023 Indonesian Coal Capacity, Captive Plants and Potential Coal Demand and Potential Annual CO₂ Emissions (MW, million tonnes, %)

Note: Estimated CO_2 emissions are based on a fixed carbon content in mid-grade Indonesian bituminous coal of 42.5%. Given that 1 tonne of pure carbon combusted yields 3.67 tonnes of CO_2 , the average emission rate is 1.56t CO_2 per tonne of coal.

Source: Statista, Bloomberg, and IEEFA estimates.

IEEFA notes that Geo Energy and Bayan Resources plan to add a total of 58mt of new capacity. This is 24mt more than the 34mt required to support the planned captive coal plant capacity of 21GW.

Captive coal plants have already become a challenging issue for stakeholders. At the Indonesia Weda Bay Industrial Park (IWIP), five captive coal-fired plants have been built, and the plan is for 12 plants to provide a total of 3.8GW of coal power.¹⁶

The US\$20 billion JETP for Indonesia is a proposal by an amalgam of governments, multilateral development banks, philanthropies, and private sector financiers. It aims to support Indonesia's



¹⁶ Climate Rights International. Nickel Unearthed: The Human and Climate Costs of Indonesia's Nickel Industry. January 2024.

decarbonization targets and advance the energy transition to help the country achieve its Paris Agreement goals.

However, JETP participants may require additional clarification of Indonesia's newly built coal capacity expansion. Further complicating matters, the country has adopted Nationally Determined Contributions under the Paris Agreement that call for a nearly 32% reduction in greenhouse gas emissions. Thus, it is not clear how the currently proposed expansions to coal mining and downstream captive coal power use will allow the country to meet its required reductions.

Cash Used More for Dividends than Capex for 2022

With record profits, the seven companies reached a high cash level of US\$10.3 billion in 2022. This cash was used mainly to pay out dividends for that year. The seven companies paid a combined US\$4.7 billion in dividends to shareholders and only reinvested US\$829 million into their businesses, more than half of which was unrelated to coal capacity. For 2022, dividends paid were 5.7 times that of capex.

Having paid out dividends in the first half of 2023, the seven companies had a combined cash pile of US\$6.5 billion at the end of the year. This level of return to shareholders could indicate that these companies believe payouts and diversifications were a better use of their net earnings than reinvestment in core mining businesses.



Figure 5: Selected Indonesian Coal Companies – Cash FY2021-FY2023 (US\$ million)

Source: Company reports and IEEFA estimates.

IEEFA analyzed the cash outflow from dividends for these seven companies in the first half of 2023 (1H2023), reflecting the dividends declared and paid from 2022 profits. This analysis included payments to both the parent company and minority shareholders, representing all the cash that could have been used to increase coal capacity. The only exception was PTBA, for which the Rp12.5trn (US\$835 million) dividend payable was used to calculate dividends paid.



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Note: As of 30 June 2023, PTBA had not paid out the dividends but had a dividend payable of Rp12.5trn. Source: Company reports and IEEFA estimates.

In Figure 6, the blue column indicates the dividends paid out in 1H2023 while the orange column represents total cash levels at the end of 2022. Adaro paid out 27% of its cash level in dividends, while Bayan Resources paid out 100%.

The group of coal companies paid out US\$4.7 billion in dividends during the first half of 2023, representing 46% of their total cash balance of US\$10.3 billion. The payout percentages varied widely; Bayan Resources paid out 100% of its FY2022 cash pile, followed by PTBA at 77%, and ITMG at 47%. Indika (9%) and Harum Energy (17%) had the lowest dividend-to-cash ratios. These two companies have invested in non-coal projects, with Indika focusing on renewable and battery-related projects, and Harum on a nickel smelter.

Capex Doubled in 2023 Compared to 2022

In 2023, the coal companies increased their capex, with Bayan Resources and Geo Energy spending the most relative to their cash levels. These two companies also boosted their borrowings as they planned to expand coal capacity in the medium term. Both companies also significantly raised their debt levels in 2023.







In 2022, the total capex for the seven companies was US\$829 million, representing only 8% of their total cash balance of US\$10.3 billion. However, in 2023, capex for the group of companies rose by 52% year-on-year, with Geo Energy investing US\$183 million to acquire new coal mining capacity. The total 2023 capex of US\$1.3 billion was 20% of the year-end cash balance of US\$6.5 billion.

Figure 8: Selected Indonesian Coal Companies – Changes in Capital Investment in Operations FY2022 to FY2023



Source: Corporate annual reports and quarterly filings.





Source: Company reports and IEEFA estimates.

In Figure 8, the blue and orange columns represent the capital expenditures for each company in 2022 and 2023 respectively. Bayan Resources spent 1% less on capex in 2023 compared to 2022, while Adaro spent 53% more in 2023 than the previous year.

In July 2023, Geo Energy announced it was acquiring a 59% stake in Golden Eagle Energy for US\$175 million and spending up to US\$200 million to expand capacity by 25mt¹⁷ to 33mt from 8.4mt in 2023.¹⁸ This aggressive expansion by Geo Energy is also reflected in its increased debt levels. In 2022, the seven Indonesian coal companies had relatively low debt levels at only US\$2.7 billion, with two companies, Adaro and Indika, accounting for 99% of the total.



Figure 9: Selected Indonesian Coal Companies' Debt FY2021-FY2023 (US\$ million)

IEEFA notes that in 2023, Bayan Resources increased its debt to US\$397 million, with a US\$200 million loan from Bank Permata and US\$200 million from Bank Mandiri.¹⁹ In September 2023, Geo Energy secured a US\$220 million loan from Bank Mandiri.²⁰

Source: Company reports and IEEFA estimates.

¹⁷ Geo Energy. <u>Media Release</u>. 27 February 2024.

¹⁸ Geo Energy. <u>Media Release</u>. 26 July 2023.

¹⁹ Bayan Resources. <u>Consolidated Financial Statements</u>. 31 December 2023.

²⁰ Geo Energy. Entry Into A Facility Agreement For US\$220 Million Term Loan Facilities From Bank Mandiri. 23 September 2023.

Capex Analysis

Geo Energy to Expand Capacity by 25mt

The coal companies can be divided into three categories with respect to the expansion of coal and coal-related business:

- Little to no expansion of coal mining: Harum Energy invested US\$70 million in September 2023 to buy a nickel smelter. ITMG spent US\$18 million on a mining contracting business and only US\$8 million on mines in 2022.²¹ With a new mine, GPK, ITMG is adding 3mt or 15% to its current capacity of 21mt by 2026.²² Indika Energy spent US\$21 million on mining capex in 2022 to improve infrastructure.
- Expansion of coal production capacity: Bayan Resources has invested in a new haul road to bring capacity up to 60mt, with current mine output at 40mt per year. Bayan Resources plans to increase to 80 million tonnes per annum (mtpa). Geo Energy bought a majority stake in Golden Eagle Energy in July 2023 to boost output by 25mt²³ to 33mt from 8.4mt in 2023.²⁴
- Expansion of coal-fired power capacity: Adaro has invested in logistics and infrastructure plus aluminum smelting operations. Adaro will build a coal-fired plant to support their aluminum smelter's first phase output of 500 kilo tonnes per annum (ktpa).²⁵ Currently, Adaro has a 2.3GW fleet of coal power plants.²⁶ PTBA commissioned the Sumsel-8 2 x 660MW coal-fired power plant in October 2023.²⁷



²¹ ITMG. <u>Analyst Briefing 4Q22 Performance Result</u>. 01 March 2023. Page 27.

²² ITMG. <u>Analyst Briefing 3Q23 Performance Result</u>. 15 November 2023. Page 6.

²³ Geo Energy. <u>Media Release</u>. 18 October 2023.

²⁴ Geo Energy. <u>Media Release</u>. 27 February 2024.

²⁵ Adaro. <u>PT Adaro Energy Indonesia Tbk</u>. May 2024. Page 9.

²⁶ Adaro. <u>PT Adaro Energy Indonesia Tbk</u>. May 2024. Page 25.

²⁷ Bukit Asam. Corporate Presentation 1Q2024 Results & Update.



Figure 10: Selected Indonesian Coal Companies – FY2022 and FY2023 Investment Summary

Source: Company reports and IEEFA estimates.

Non-Coal Investments and Coal Expansion

Planned Increase in Coal Production Capacity and Coal Power

The 2023 capex for the coal companies is summarized below, along with an outline of their coalrelated and non-coal assets. This summary also highlights the future expansion of coal mining capacity and coal power assets among the seven coal companies.

Adaro: The company has invested in coking coal assets, hydropower, as well as solar and wind power. Its other major assets include ports and a proposed three-stage aluminum smelter. Adaro currently has 2.3GW of coal-fired power plant capacity and, according to IEEFA estimates, would have to build two 1.1MW coal plants to support the two phases of 500ktpa aluminum smelting capacity. In an attempt at mitigation, Adaro has indicated that it is considering renewable energy for Phase 2.²⁸ This move comes after IEEFA's report on Adaro aluminum, which identified that the plants could add 5.2mt of CO₂ emissions.²⁹ In April 2024, Hyundai Motors ended an aluminum supply agreement with Adaro Minerals due to a climate campaign by K-pop fans urging the car company not to procure aluminum produced using coal power.³⁰



²⁸ Adaro Energy. <u>Public Expose</u>. 29 February 2024.

²⁹ IEEFA. <u>The coal cost of aluminum</u>. 11 October 2023.

³⁰ Reuters. <u>Hyundai Motor ends Indonesia aluminum deal after climate campaign by K-pop fans.</u> 2 April 2024.

Bayan Resources: The company has a long-term plan to double coal output to 80mt from the current 40mt.³¹ Bayan Resources is focusing on building a barging jetty and haul road but has not provided a schedule for the eventual increase in capacity.

Geo Energy Resources: The company has indicated it plans to expand output by 25mt from the current level of 8.4mt.³² The company raised US\$220 million from Bank Mandiri in September 2023³³ and US\$35 million in equity financing from Swiss Investment firm ResInvest.³⁴ It also signed an agreement with Swiss Energy trading company EP Resources for the offtake of the increased production. This increased production involved spending US\$200m to boost capacity in 2023 by 25mt from 8.4mt to 33mt.^{35, 36}

Harum Energy: The company invested US\$71 million to buy a nickel pig iron plant, with a 2023 output of 28.8k tonnes of nickel.³⁷

Indika Energy: Indika divested its coal business MUTU, reducing coal revenue contribution by US\$198 million in the first nine months of 2023.³⁸ For the same period, sales volume was 1.4mt. Indika also invests in gold mining, bauxite mining, nickel trading, and solar power.

ITMG: ITMG has invested in 10MW of solar capacity, and its new mine GPK will add 3mt, or 15%, to its current 21mt capacity.³⁹

PTBA: The company commissioned its new 1.32GW coal power plant, Sumsel-8, in October 2023. It has also invested in solar power.

Company	Unit	Power capacity	Possible	Total
Adaro Energy	GW	2.3	2.2	4.5
РТВА	GW	1.3		1.3
Total (GW)	GW	3.6	2.2	5.8
% increase	%			61.1

Table 2: Selected Indonesian Coal Companies' Coal Power Expansion (GW)

Source: Company reports and IEEFA estimates.

³¹ Bayan Resources. <u>Third Quarter 2023 Update Presentation</u>.

³² Geo Energy. <u>Media Release.</u> 18 October 2023.

³³ The Edge Singapore. Geo Energy confirms US\$220 mil term loan from Bank Mandiri. 24 September 2023.

³⁴ Geo Energy. <u>Media Release</u>. 7 February 2024.

³⁵ Geo Energy. <u>Media Release</u>. 27 February 2024.

³⁶ Geo Energy. <u>Media Release</u>. 26 July 2023.

³⁷ Harum Energy. FY 2023 Summary and Highlights. 3 April 2024.

³⁸ Indika Energy. <u>Company Update 9M 2023</u>. October 2023.

³⁹ ITMG. <u>Analyst Briefing 3Q23 Performance Result</u>. 15 November 2023.

Company	Unit	Current coal capacity	Additions	Total
Bayan Resources	m tonnes per year	40.0	40.0	80.0
Geo Energy Resources	m tonnes per year	8.0	17.0	25.0
ITMG	m tonnes per year	21.0	3.0	24.0
Total	m tonnes per year	69.0	60.0	129.0
Total 2023 sales	m tonnes	202.4	60.0	
as % of total capacity				29.6

Source: Company reports and IEEFA estimates.

Conclusion: Diversification but Still Coal Expansion

With record profits, the seven Indonesian coal producers examined in this report reached a new high cash level of US\$10.3 billion in 2022. Of this, US\$4.7 billion was paid out in dividends, representing 46% of the total cash pile. In the same year, capex was only US\$829 million, which represents a mere 8% of the total cash balance of US\$10.3 billion.

However, 2023 capex for the group of companies rose 52% year-on-year with Geo Energy investing US\$183 million to acquire new coal mining capacity. The total 2023 capex of US\$1.3 billion was 20% of the end 2023 cash balance of US\$6.5 billion.

Five of the seven companies are investing in non-coal assets, with Adaro building out aluminum smelting facilities and Harum Energy investing in nickel smelting. Harum has not identified the power source for its nickel smelter, but Adaro has added renewable sources to its proposed 2.2GW facilities for the first two phases of its aluminum smelter. IEEFA views this as an acknowledgment that stakeholders want to see less coal power, as supported by the cancellation of Hyundai's agreement to buy aluminum from Adaro in April 2024 due to pressure from the Korean public. Adaro, PTBA, and Indika are also investing in solar and wind power.

Two companies, Bayan and Geo Energy, have plans to expand coal capacity up to 58mt, which is 27% of the combined 2023 sales of 217mt. In 2023, Bayan Resources increased debt to US\$397 million with a US\$200 million loan from Bank Permata and US\$200 million from Bank Mandiri.⁴⁰ In September 2023, Geo Energy secured a US\$220 million loan from Bank Mandiri.⁴¹ IEEFA also notes that PTBA commissioned its new 1.32GW coal power plant, Sumsel-8, in October 2023.

Captive coal plants are threatening to be a major driver of future Indonesian coal demand. According to Bloomberg, Indonesia's captive power capacity already accounts for 13GW⁴², which is 32% of Indonesia's 2023 coal-fired capacity of 40.7GW (estimated by Statista); and the total of 21GW (estimated by Bloomberg) upon completion could add a staggering 52% to 2023 coal power

⁴⁰ Bayan Resources. <u>Consolidated Financial Statements</u>. 31 December 2023.

⁴¹ Geo Energy. Entry Into A Facility Agreement For US\$220 Million Term Loan Facilities From Bank Mandiri. 23 September 2023.

⁴² Bloomberg. Money and Politics Put World's Biggest Climate Deal at Risk. 4 September 2023.

capacity. At the Indonesia Weda Bay Industrial Park (IWIP), five captive coal-fired plants have been built, and the plan is for 12 plants to provide a total of 3.8GW of coal power.⁴³ The progress of Indonesia's US\$20 billion JETP proposal hangs in the balance based on how the carbon intensity of captive power will be addressed.

The progress of Indonesia's US\$20 billion JETP proposal hangs in the balance based on how the carbon intensity of captive power will be addressed.

While only two of the seven companies have major coal expansion plans, the addition of 58mt of capacity could support up to 21GW of coal-fired capacity. This would risk increasing Indonesia's carbon emissions by nearly 53mt per year, which runs counter to the approved national decarbonization commitments.

In conclusion, the current plans of Indonesian banks and coal companies to increase coal capacity stand in stark contrast to the global momentum towards decarbonization. For Indonesia to meet its climate commitments, it is imperative that Indonesian banks and coal companies realign their strategies towards clean energy sources. This shift is also crucial for maintaining economic competitiveness and securing a resilient future for Indonesia's energy sector.

⁴³ Climate Rights International. Nickel Unearthed: The Human and Climate Costs of Indonesia's Nickel Industry. January 2024.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. <u>www.ieefa.org</u>

About the Author

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Ghee Peh is an Energy Finance Specialist with a focus on the Asian coal industry and Southeast Asia. Ghee has worked on major mining IPOs in Hong Kong and Indonesia including coal, copper and gold companies, and has a deep interest in commodity markets.

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