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Indonesian Coal at the Mercy of the Dragon and Tiger

Falling Demand in China and India Signal Tough Times Ahead for Indonesian Exports

Executive Summary

Coal sector analysts have been busy in recent months mapping the negative impact of low coal prices from the COVID-19 pandemic on Indonesian coal companies' cash flow and government royalties.

Our first report concluded that Indonesia's 11 listed coal producers face an onerous challenge in the pandemic-induced operating environment, with its lockdowns and slumping prices. If these circumstances continue for a long period, stakeholders could start asking tough questions about each of the companies' viability and status as going concerns. (See Can the Indonesian Coal Industry Survive COVID-19).

To get a full picture of the sector, it's necessary to look more closely at the newly volatile export demand landscape. This is critical because Indonesia's coal sector relies on exports for more than three quarters of its demand and suffers from concentration risk because more than 50% of its exports go to two key markets: China and India. Indonesia's Ministry of Energy and Mineral Resources (MEMR) said the country exported 175 million tonnes (mt) of coal from January to May 2020. It forecasts exports of 435mt for 2020, down from 472mt in 2019, representing a year-on-year decline of 8%. In 2019, Indonesian companies exported 29% of their coal to China and 23% to India.

The export outlook in 2020 for China and India reflects the impact of weak demand and the domestic market considerations that are working against a prompt pickup in demand. Both markets have natural demand for Indonesia's low ash/medium energy coal, with China importing 46% and India importing 43% of foreign-supplied coal from the country in 2019. But both nations have significant domestic coal suppliers that could fill gaps in supply, which could put pressure on Indonesia's pricing power.

The challenge for analysts will be judging whether, as COVID-19 abates, the market will quickly return to business as usual, or whether China and India will take full advantage of the downturn to preserve hard currency and favour domestic players. Based on IEEFA's analysis, the demand outlook is currently better in China than India, but domestic supply for both has been growing and government policy in both markets favours reduced imports.

Based on these new demand considerations, IEEFA forecasts that Indonesian coal exports to China will decline by 10% year-on-year, and to India by 20% year-on-year. This will result in a demand shortfall for 2020 for the 10 listed coal companies

in our sample. They accounted for 66% of Indonesian coal exports in 2019. The companies with the largest shortfall are:

- **By volume to both markets**: Bumi Resources (3.8mt), Golden Energy and Resources, and Adaro (2.5mt each),
- **By percentage of total sales to both markets**: Golden Energy and Resources (8.4%), Harum (7.7%), and Geo Resources (6.6%).

A volume shortfall means these producers are less able to cut costs and must either reduce output or secure new customers to take up the shortfall. The MEMR has already stated that Indonesia wants to boost sales to Vietnam, Bangladesh, and Pakistan, but the outlook for the three markets is uneven, ruling out easy negotiations.

We estimate the 10 companies in our sample could face a 5% sales volume shortfall in 2020. However, the smaller-scale producers outside our sample may face an 11% sales volume shortfall in 2020. These producers have limited access to public debt and equity markets and may be less able to manage the financial impact of a decline in sales volume.

Table of Contents

Executive Summary 1
A Closer Look at Indonesia's Coal Export Fundamentals 4
Indonesia Accounts for More Than 40% of China and India's Coal Imports 5
China Coal Import Outlook 6
India Coal Import Outlook 9
Assessing the Impact on Indonesian Coal Companies 12
Estimating the Shortfall and Impact 15
Conclusion 17
About the Author 18

A Closer Look at Indonesia's Coal Export Fundamentals

According to the MEMR, Indonesia exported 472mt, or about 77% of its output of 610mt, in 2019. Domestic Indonesian sales were about 138mt in 2019, a year-on-year increase of 20%.

Table 1: Indonesian Coal Production and Exports 2017-19 (million tonnes)

	Unit	2017	2018	2019
Coal production	m tonnes	461	557	610
Coal export	m tonnes	366	442	472
Domestic Indonesia sales	m tonnes	95	115	138
Coal export	%	79.4	79.4	77.4
Domestic use	%	20.6	20.6	22.6

Source: MEMR, company reports and IEEFA estimates.

According to media reports, China and India together accounted for 52% of Indonesia's coal exports in 2018 and 2019. China imported 126mt in 2018 and 139mt in 2019, accounting for 28% and 29%, respectively. India imported 105mt in 2018 and 106mt in 2019, accounting for 24% and 23%, respectively. For the period 2017–19, these markets accounted for more than 50% of Indonesia's coal exports.

Table 2: Indonesian Coal Exports to China and India 2017-19 (million tonnes)

	Unit	2017	2018	2019
Exports to China	m tonnes	109	126	139
Exports to India	m tonnes	90	105	106
Total exports to both	m tonnes	199	231	245
Total Indonesia exports	m tonnes	366	442	472
Exports to China	%	29.8	28.4	29.4
Exports to India	%	24.5	23.7	22.5
Exports to both	%	54.2	52.2	51.9

Source: Media reports, company reports and IEEFA estimates.

Indonesia Accounts for More Than 40% of China and India's Coal Imports

We estimate that Indonesia had a market share of 43% of India's total coal imports and 46% of China's total coal imports in 2019. This market share was even higher for thermal coal, with Indonesia accounting for an estimated 54% of India's imports and 62% of China's imports in 2019.

We see both price and volume risk for the Indonesian coal industry. In addition to lower coal prices, both major markets are likely to import significantly less coal year-on-year from Indonesia. In addition to COVID-19's impact on demand, it has affected the supply side through government policies to limit imports and boost domestic coal production.

According to media reports, several regional customs authorities in China are looking to maintain 2020 coal imports at 2017 levels. China imported 271mt in 2017, 10% below its 300mt of imports in 2019.

Table 3: China's Total and Thermal Coal Imports from Indonesia 2017-19 (million tonnes)

	Unit	2017	2018	2019
Imports from Indonesia	m tonnes	109	126	139
Thermal coal imports	m tonnes	201	217	225
Coking coal imports	m tonnes	70	65	75
Total imports	m tonnes	271	282	300
Indonesia's share of China's thermal coal imports	%	54.2	57.9	61.6
Indonesia's share of China's total coal imports	%	40.2	44.6	46.2

Source: IHS Markit, Argus Media reports, MEMR and IEEFA estimates.

Indonesia's coal exports face similar demand risks in the Indian market. According to media reports, Coal India Limited (CIL) has a mandate to replace at least 100mt of imported coal with domestic non-coking coal in the financial year 2020–21. This represents about 40% of India's calendar year (CY) 2019 imports of 249mt. In its bid to substitute imports with domestic coal, CIL has been connecting with non-regulated sectors like sponge iron, cement and aluminium for domestic coal. This places Indonesia's exports at risk as it supplied 106mt of thermal coal to India in 2019.

Table 4: India's Total and Thermal Coal Imports from Indonesia 2017-19 (million tonnes)

	Unit	2017	2018	2019
Imports from Indonesia	m tonnes	90	105	106
Thermal coal imports	m tonnes	144	172	198
Coking coal imports	m tonnes	46	52	51
Total imports	m tonnes	190	224	249
Indonesia's share of India's thermal coal imports	%	62.0	61.0	53.8
Indonesia's share of India's total coal imports	%	47.0	46.8	42.7

Source: IHS Markit, Argus Media reports, MEMR and IEEFA estimates.

China Coal Import Outlook

Many Moving Parts, Forecast to Fall 10% Year-On-Year

China's coal demand declined in the first quarter of 2020. According to the China National Coal Association, the country consumed 870mt in the first quarter of 2020, down 6.8% year-on-year. The power sector's coal consumption fell 6.8% year-on-year to 507mt, while construction sector usage fell 24.7% year-on-year to 65mt. Although the coal market remains volatile, industry observers estimate an average decline of 8% to 12% year-on-year in China's coal demand. IEEFA currently estimates a 10% year-on-year fall in China's 2020 coal imports, based on the following four key variables:

- **Coal imports:** From January to April 2020, imports rose 27% year-on-year, but we note this is a function of lower prices.
- **Domestic coal production:** After declining year-on-year in January and February, output in March and April rose 6.4% and 6.0% year-on-year, respectively.
- **Power generation:** Thermal power generation declined 8.2% year-on-year in the first quarter but rose 1.5% year-on-year in April.
- **Steel output:** This increased 1.3% year-on-year for the first four months of 2020.

A detailed examination of China's data, together with press commentary on the Chinese Government's policy on coal imports, reinforces our view that caution is merited. According to media reports, China's coal imports grew 22% year-on-year in April, and January to April 2020 imports increased 27% year-on-year, but the growth was boosted by lower prices for coal imports from Indonesia and Australia. The average April Newcastle benchmark price of US$56.2/tonne is 35% lower year-on-year.

Table 5: China's Total Coal Imports and Newcastle Benchmark Price January to April 2020 (million tonnes, US$/Tonne)

	Coal Imports (mt)	y-y change (%)	Newcastle price (US$/t)	y-y change (%)
Q1 2020	95.8	28.5	67.8	-29.2
Apr 2020	31.0	22.3	56.2	-35.2
Jan-Apr 2020	126.7	26.9	64.9	-30.6

Source: Reuters, Indexmundi and IEEFA estimates.

According to media reports, China's coal production experienced year-on-year growth of 6.4% in March and 6.0% in April. This growth is unsurprising as the National Energy Administration announced that China's production had reached 83.4% of total coal mining capacity as of 3 March. The COVID-19-related disruption to China's domestic coal output appears limited to January–February 2020, when output declined 4.8% year-on-year, which is bad news for coal exporters to China. Additionally, 12 Chinese coal companies have called for a 10% cut in output from current levels to support domestic prices. The year-on-year growth in China's domestic coal production would also tie in with government policy to impose an import quota this year that is set at 2017 levels, which are 10% below 2019 levels.

Table 6: China's Total Coal Output, January to April 2019-20 (million tonnes)

Coal output	2020 (mt)	y-y change (%)	2019 (mt)
Jan-Feb	489	-4.8	514
March	341	6.4	321
April	320	6.0	302
Q1	830	-0.5	834
Jan-Apr	1,150	1.3	1,135

Source: Reuters, Xinhuanet and IEEFA estimates.

From January to April 2020, total Chinese power output fell 4.7% year-on-year, while thermal power output fell 5.9% year-on-year. In April, total power output grew 2.0% year-on-year, and thermal power output was up 1.5% year-on-year. From January to April 2020, 87 % of China's thermal power capacity was from coal-fired plants, with the remainder from gas-fired facilities, according to the China Electricity Council. We note that even with the slight uptick in thermal power output for April, it is too early to suggest a sustained recovery in coal usage and imports.

Table 7: China's Total and Thermal Power Output, January to April 2020 (billion Gigawatt hours)

Billion GWh	Thermal power	y-y change (%)	Overall power	y-y change (%)
Jan-Feb 2020	780.7	-11.9	1,026.7	-8.2
Mar 2020	389.4	-7.5	552.5	-5.6
Apr 2020	401.2	1.5	544.8	2.0
Q1 2020	1,174.6	-8.2	1,582.2	-6.8
Jan-Apr 2020	1,575.8	-5.9	2,127.0	-4.7

Source: China Electricity Council and IEEFA estimates.

China's steel output serves as an indicator of economic activity. It rose 1.3% year-on-year for January to April 2020, indicating some stability. According to Mysteel Global, blast furnace capacity utilisation rates at 163 mills rose to 85.6%, the highest rate in nearly 11 months, as of 15 May. However, against the backdrop of an increase in domestic coal production, this level of economic activity would still present downside risks for Chinese coal imports.

Table 8: China's Total Steel Output, January to April 2019-2020 (million tonnes)

Steel output	2020 (mt)	y-y change (%)	2019 (mt)
Jan-Feb	155.5	3.9	149.6
Mar	79.0	-1.7	80.3
Apr	85.0	0.2	84.9
Q1	234.4	1.7	230.5
Jan-Apr	319.5	1.3	315.4

Source: National Bureau of Statistics, Statista and IEEFA estimates.

The outlook on government policy remains negative for exports to China, thanks to the coal import quota that seeks to maintain 2020 coal imports at the 2017 level of 270mt compared with 300mt in 2019. However, according to media reports, Guangdong and Fujian provinces used up the quota in the first four months of 2020. One positive sign for Indonesia's exporters is the suggestion in media reports that China may reduce coal imports from Australia from July because of political tensions.

Meanwhile, China's coal producers have also been calling for government help. The China Coal Transportation and Distribution Association (the state-run representative body for domestic miners) has asked the National Development and Reform Commission to help restrict imports of cheap fuel. Additionally, 12 Chinese coal producers have called for a 10% reduction in domestic coal output. Industry observers have estimated a year-on-year decline of 8–12% for China coal imports. This is in line with IEEFA's conclusion that Chinese coal imports could decline 10% year-on-year in 2020.

Table 9: Summary of China's Coal Import Drivers and Forecast Decline

Indicator	Impact on imports	Notes
China coal imports	Mixed	Lower prices drove y-y rise in Q1 but to slow down
China coal output	Negative	Strong y-y recovery starting in March, likely oversupply
China power output	Negative	Jan-Apr thermal power down 5.9% y-y, Apr +1.5% y-y
China steel output	Neutral	Jan-Apr output +1.3% y-y
Government policy	Negative	Import quota at 2017 levels, down 10% from 2019
Overall	10% y-y Decline	Forecast coal import decline at 10% y-y

Source: IEEFA estimates.

India Coal Import Outlook

Weak Demand, Import Substitution, Expect 20% Year-On-Year Decline

For India, the coal demand indicators have clearly turned negative. According to Argus Media, since the government declared a nationwide lockdown on 25 March, the country's daily average power output has been 20% lower than the three-year seasonal average. It estimates power sector coal usage may have fallen by as much as 10mt of NAR 5,000 kcal/kg-equivalent coal to 30mt in April. McCloskey Coal reports that India's coal stockpile is at 165mt and that nearly half (80mt) is at CIL and other mines. This amount represents 30 to 40 days use. Power plant stocks were at 50mt, which is enough for 29 days. Other indicators, such as imports, domestic coal output, and power and steel output, all point to a large year-on-year decline for India's coal imports.

Industry observers expect a 20% year-on-year fall in 2020 India's coal imports. This is in line with our forecast, but we believe there may be further downside risks. As a result of these, IEEFA expects India to import less Indonesian coal, based on our evaluation of the following four key variables:

- **Coal imports:** After recording year-on-year growth for January, coal imports experienced year-on-year declines for three months, with March and April down 28% and 29%, respectively.
- **Domestic coal production:** Coal production from CIL, the largest producer, increased 9.5% year-on-year for the first quarter of 2020.
- **Power generation:** Thermal power generation fell 1.5% year-on-year in the first quarter of 2020 and total power generation was down 32% year-on-year in April.
- **Steel output:** From January to April, output was down 20% year-on-year, with April declining 65% year-on-year.

Unlike China, where January to April 2020 coal imports rose, Indian coal imports for the same period were down 18% year-on-year. India's coal imports have recorded year-on-year declines since February as COIVD-19 disrupted consumption and even the logistics of coal. This is despite average monthly coal benchmark prices falling at least 29% year-on-year over the same period.

Table 10: India Total Coal Imports and Newcastle Benchmark Price, January to April 2020 (million tonnes, US$/Tonne)

Coal imports	2020 (mt)	y-y change (%)	Newcastle price (US$/t)	y-y change (%)
Jan	18.2	5.5	69.7	-29.3
Feb	17.0	-14.2	67.6	-29.1
Mar	15.7	-27.5	66.1	-29.1
Apr	18.7	-29.0	56.2	-35.2
Q1	51.0	-13.3	67.8	-29.2
Jan-Apr	69.6	-18.2	64.9	-30.6

Source: Economic Times, Indexmundi and IEEFA estimates.

According to media reports, CIL's first quarter of 2020 coal production increased 9.5% year-on-year. Although this slowed down to a daily rate of 1.3mt for the first 22 days of April, down 11% year-on-year, these strong gains are bad news for coal exporters to India. The Indian Government has announced measures that are similar to the Chinese Government's coal import quota. In May, CIL was mandated to replace 100mt (40% of CY 2019 coal imports) with domestic non-coking coal for the 2020–21 fiscal year.

Table 11: CIL's Total Coal Output, January to April 2019-20 (million tonnes)

Coal output	2020 (mt)	y-y change (%)	2019 (mt)
Jan	63.1	10.3	57.2
Feb	66.3	14.1	58.1
Mar	84.4	5.6	79.9
Apr (22 days)	29.5	-11.3	33.2
Q1	213.7	9.5	195.2
Jan-Apr	243.2	6.5	228.4

Source: Business Standard, Steelguru and IEEFA estimates.

For the period January to April 2020, India's total power output was down 7.4% year-on-year and its first quarter 2020 thermal power output was down 1.5% year-on-year. We note that total power output recorded an 8.2% year-on-year decline for March and thermal power output fell 12.9% year-on-year. In April, total power output was down 32.4% year-on-year. Data for thermal power output is not yet available but should also be significantly down, in line with total power output.

These falls would be consistent with the year-on-year decline in coal imports since February and the build-up of stockpiles at CIL and power plants.

Table 12: India's Total and Thermal Power Output, January to April 2020 (billion Gigawatt hours)

Billion GWh	Thermal power	YoY change	Overall power	YoY change
Jan 2020	90.8	0.5	113.7	3.2
Feb 2020	89.3	9.7	112.2	11.5
Mar 2020	82.8	-12.9	107.4	-8.2
Apr 2020			80.5	-32.4
Q1 2020	262.9	-1.5	333.3	1.7
Jan-Apr 2020			413.8	-7.4

Source: Central Electricity Authority of India and IEEFA estimates.

India's steel output acts as an indicator of economic activity. Between January and April, February was the only month that recorded a year-on-year rise in steel output, a modest 1.5%. Steel output recorded year-on-year declines of 13.8% in March and 65.2% in April, due to the full month of lockdown that started on 25 March. Against the backdrop of an increase in domestic coal production in the first quarter of 2020, a build-up of coal stockpiles and a fall in power generation, this level of economic activity presents significant downside risks to India coal imports.

Table 13: India's Total Steel Output, January to April 2019-2020 (million tonnes)

Steel output	2020 (mt)	y-y change (%)	2019 (mt)
Jan	9.3	-3.2	9.6
Feb	9.6	1.5	9.4
Mar	8.7	-13.8	10.0
Apr	3.1	-65.2	9.0
Q1	27.5	-5.4	29.1
Jan-Apr	30.6	-19.5	38.1

Source: Business Standard, Trading Economics and IEEFA estimates.

The Indian Government has adopted a policy that supports its domestic coal sector, calling for import reductions. In May 2020, CIL was mandated to replace 100mt of coal (40% of CY 2019 coal imports) with domestic non-coking coal for the 2020–21 fiscal year. CIL's first quarter 2020 output grew 9.5% year-on-year, presenting a significant risk to Indian coal imports. The risk is greater for Indonesia, because it exports mainly thermal coal. We believe India may have to continue importing coking coal for steel making because its domestic producers mainly supply thermal coal. Industry observers have estimated a 20% year-on-year decline in India's coal imports. We agree, but also warn that there is a risk of a larger fall.

Table 14: Summary of India's Coal Import Drivers and Forecast Decline

Indicator	Impact on imports	Notes
India coal imports	Negative	Despite lower prices, Feb, Mar and April declined y-y
India coal output	Negative	Q1 2020 CIL output rose 9.5% y-y, likely oversupply
India power output	Negative	Q1 2020 thermal power down 1.5% y-y, Apr total power -32% y-y
India steel output	Negative	Jan-Apr output -20% y-y with April down 65% y-y
Government policy	Negative	CIL to reduce coal imports by 100mt (40% of 2019 total)
Overall	20% y-y Decline	Clear risk of a bigger decline

Source: IEEFA estimates.

Assessing the Impact on Indonesian Coal Companies

The bad news for Indonesia's coal companies is that they are likely to have lower sales volumes to India and China for 2020. This may also reflect cyclical and secular trends if both major markets continue to prioritise domestic production ahead of imports. To stress test our assumptions about Indonesia's coal export prospects, we evaluated the following key fundaments for 10 of Indonesia's leading coal producers:

- Percentage and volume of sales to India and China in 2018–19
- Sales shortfalls for 2020 if year-on-year sales to India and China fall by 20% and 10%, respectively
- Company rankings in terms of shortfall, by volume and by percentage.

To put each company's export risk exposure in context, we compiled coal sales volumes to China and India, as disclosed by the 11 listed Indonesian companies. We note that ABM Investama does not disclose sales volumes or revenue breakdowns by country. For Geo Resources and Golden Energy, we used their revenue breakdowns to estimate shipment volumes to the major markets.

In 2018, Bumi Resources sold 25.3mt of coal to China and India, which is 83% more than the second-placed Indika Energy, which had combined sales of 13.8mt. Adaro was ranked third, with 13.6mt. In relation to China, Bumi had top ranking in 2018, with 13.9mt, 28% ahead of second-placed Indika, with 10.8mt. For India, Bumi also took the top rank with 11.4mt, which is 90% ahead of second-placed Adaro, with 6.0mt.

Table 15: IEEFA Sample Coal Companies' 2018 Total, China and India Sales Volumes (million tonnes)

Million tonnes		2018	2018	2018	2018
Company	Stock Code	Sales	China	India	China+India
Bumi Resources	BUMI.JK	80.83	13.88	11.39	25.27
Indika	INDY.JK	34.07	10.83	3.00	13.83
Adaro	ADRO.JK	54.39	7.61	5.98	13.60
Golden Energy and Resources	AUE.SI	22.80	9.12	4.26	13.38
Bayan	BYAN.JK	28.30	3.11	5.38	8.49
ITMG	ITMG.JK	23.50	4.94	3.53	8.46
Geo Energy Resources	RE4.SI	7.10	5.73	0.63	6.37
PTBA	PTBA.JK	24.60	2.71	2.46	5.17
Harum	HRUM.JK	4.60	0.64	1.10	1.75
Toba Bara	TOBA.JK	4.90	0.39	0.69	1.08
Total		285.09	58.97	38.42	97.39

Source: Company Reports and IEEFA estimates.

In 2019, Bumi Resources sold 24.7mt of coal to China and India, 34% more than second-placed Golden Energy, which had combined sales of 18.4mt. Adaro was ranked third, with 16.0mt. For China, Indika ranked first in 2019, with 12.2mt, 5% ahead of second-placed Golden Energy, with 11.7mt. In India, Bumi ranked first, with 13.3mt, 50% ahead of second-placed Adaro, with 8.9mt.

Table 16: IEEFA Sample Coal Companies' 2019 Total, China and India Sales Volumes (million tonnes)

Million tonnes		2019	2019	2019	2019
Company	Stock Code	Sales	China	India	China+India
Bumi Resources	BUMI.JK	88.19	11.39	13.28	24.66
Golden Energy and Resources	AUE.SI	30.00	11.67	6.69	18.36
Adaro	ADRO.JK	59.18	7.10	8.88	15.98
Indika	INDY.JK	34.90	12.22	3.49	15.71
Bayan	BYAN.JK	29.20	3.21	7.30	10.51
ITMG	ITMG.JK	25.30	7.34	1.52	8.86
Geo Energy Resources	RE4.SI	7.40	3.74	0.56	4.31
PTBA	PTBA.JK	27.80	0.00	2.78	2.78
Harum	HRUM.JK	4.10	1.93	0.62	2.54
Toba Bara	TOBA.JK	4.20	0.46	0.76	1.22
Total		310.27	59.06	45.87	104.92

Source: Company Reports and IEEFA estimates.

In 2019, the companies in our sample accounted for 66% of total Indonesian coal exports, these same companies accounted for 43% of Indonesia's exports to China, and the IEEFA sample also accounted for 43% of exports to India.

Table 17: IEEFA Sample and Other's Share of 2018-19 Total, China and India Sales Volumes (million tonnes)

Million tonnes	Unit	2018	2019
IEEFA sample's exports	m tonnes	285.1	310.3
Others' exports	m tonnes	156.9	161.7
Total exports	m tonnes	442.0	472.0
IEEFA sample's exports to China	m tonnes	59.0	59.1
Other's exports to China	m tonnes	66.7	79.5
Total exports to China	m tonnes	125.7	138.6
IEEFA sample's exports to India	m tonnes	38.4	45.9
Other's exports to India	m tonnes	66.4	60.5
Total exports to India	m tonnes	104.8	106.4

Source: MEMR, company reports and IEEFA estimates.

Based on IEEFA's data, we estimate that the smaller producers outside our sample accounted for 57% of exports to China and India in 2019. This compares to their total share of 34% of all Indonesian coal exports in 2019. This means the smaller producers are more exposed to the two large markets and may have difficulty diversifying away and finding new export markets.

Table 18: IEEFA Sample and Other's % Share of 2018-19 Total, China and India Sales Volumes (million tonnes, Percentage)

Million tonnes	Unit	2018	2019
Total exports to China	m tonnes	125.7	138.6
IEEFA sample's share of exports to China	%	46.9	42.6
Other's share of exports to China	%	53.1	57.4
Total exports to India	m tonnes	104.8	106.4
IEEFA sample's share of exports to India	%	36.7	43.1
Other's share of exports to India	%	63.3	56.9
Total exports to China and India	m tonnes	230.5	245.0
IEEFA sample's share of exports to China and India	%	42.2	42.8
Other's share of exports to China and India	%	57.8	57.2
Total exports	m tonnes	442.0	472.0
IEEFA sample's share of exports	%	64.5	65.7
Other's share of exports	%	35.5	34.3

Source: MEMR, company reports and IEEFA estimates.

Estimating the Shortfall and Impact

When estimating the shortfall faced by Indonesian coal producers, we based our calculations on the reported 2019 full-year volumes for China and India. We estimate they face year-on-year declines in exports of 10% to China and 20% to India.

Table 19: IEEFA Sample's 2019 Total Sales, 2020 China and India Sales Shortfall (million tonnes, Percentage)

Million tonnes		2019	2020	2020	2020	Shortfall
Company	Stock Code	Sales	China shortfall	India shortfall	China+India	as % of total
Bumi Resources	BUMI.JK	88.19	1.14	2.66	3.79	4.30
Golden Energy and Resources	AUE.SI	30.00	1.17	1.34	2.51	8.35
Adaro	ADRO.JK	59.18	0.71	1.78	2.49	4.20
Indika	INDY.JK	34.90	1.22	0.70	1.92	5.50
Bayan	BYAN.JK	29.20	0.32	1.46	1.78	6.10
ITMG	ITMG.JK	25.30	0.73	0.30	1.04	4.10
Geo Energy Resources	RE4.SI	7.40	0.37	0.11	0.49	6.58
PTBA	PTBA.JK	27.80	0.00	0.56	0.56	2.00
Harum	HRUM.JK	4.10	0.19	0.12	0.32	7.70
Toba Bara	TOBA.JK	4.20	0.05	0.15	0.20	4.70
Total		310.27	5.91	9.17	15.08	4.86

Source: Company reports and IEEFA estimates.

IEEFA estimates that the three companies most at risk in terms of volume to these two major markets are Bumi with 3.8mt, and Golden Energy and Adaro, each with around 2.5mt. In terms of percentage of total sales volume, the three companies most at risk are Golden Energy at 8.4%, Harum at 7.7% and Geo Energy at 6.6%. A shortfall in volume would mean these producers would be less able to cut costs, and they would have to consider either reducing output or finding new customers to take up the shortfall.

However, we stress that when we apply the same calculation to other Indonesian coal producers' export volumes to China and India, it shows that they face greater risks.

Table 20: IEEFA Sample and Other's 2019 Total, China and India Sales Volumes, 2020E Shortfall (million tonnes, Percentage)

Miliion tonnes	2019	2020E shortfall	Shortfall as % of total
IEEFA sample's exports to China	59.1	5.9	10.0
Other's exports to China	79.5	8.0	10.0
Total exports to China	138.6	13.9	10.0
IEEFA sample's exports to India	45.9	9.2	20.0
Other's exports to India	60.5	12.1	20.0
Total exports to India	106.4	21.3	20.0
IEEFA sample's exports	310.3	15.1	4.9
Other's exports	161.7	18.0	11.1
Total exports	472.0	33.1	7.0

Source: MEMR, company reports and IEEFA estimates.

However, we highlight that other non-listed and smaller-scale coal producers account for 57% of total coal exports to China and India in 2019. We estimate that these producers outside our sample could face a total shortfall of 11%. These producers may have customer bases that are less diversified than those of our 10-company sample. Due to smaller companies' less detailed financial disclosure, it is difficult to analyse the financial impact of the shortfall. However, the smaller producers have less access to public debt and equity markets and may be less able to manage the financial impact of such a shortfall.

Conclusion

The Indonesian coal industry not only has to contend with lower coal prices, it must deal with lower export volumes to the two key markets of China and India, which account for more than 50% of total exports. In 2019, China accounted for 29% of Indonesian coal exports and India accounted for 23%. Our analysis of demand and supply trends suggests that exports could undergo year-on-year declines of 10% to China and 20% to India.

Of the 10 listed companies in our sample, those that were most highly geared to China and India in 2019 were, by volume to both markets, Bumi, Golden Energy and Resources, and Adaro. As a percentage of total sales to both markets, the three most geared were Golden Energy and Resources, Harum, and Geo Resources.

We estimate that smaller producers outside our sample accounted for 57% of total exports to China and India in 2019. This compares to their 34% total share of all Indonesian coal exports in 2019. However, these producers risk facing an 11% sales volume shortfall in 2020, compared to a 5% shortfall for our sample group. This means the smaller producers are more exposed to the two large markets and may have difficulty diversifying away and finding new export markets.

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. www.ieefa.org

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