



ARCH

BMO Global Metals, Mining & Critical Minerals Conference

F E B R U A R Y 2 7 , 2 0 2 4

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Forward-Looking Information

Forward-Looking Statements: This presentation contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended - that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and future plans, and often contain words such as “should,” “could,” “appears,” “estimates,” “projects,” “targets,” “expects,” “anticipates,” “intends,” “may,” “plans,” “predicts,” “believes,” “seeks,” “strives,” “will” or variations of such words or similar words. Actual results or outcomes may vary significantly, and adversely, from those anticipated due to many factors, including: loss of availability, reliability and cost-effectiveness of transportation facilities and fluctuations in transportation costs; operating risks beyond our control, including risks related to mining conditions, mining, processing and plant equipment failures or maintenance problems, weather and natural disasters, the unavailability of raw materials, equipment or other critical supplies, mining accidents, and other inherent risks of coal mining that are beyond our control; inflationary pressures and availability and price of mining and other industrial supplies; changes in coal prices, which may be caused by numerous factors beyond our control, including changes in the domestic and foreign supply of and demand for coal and the domestic and foreign demand for steel and electricity; volatile economic and market conditions; the effects of foreign and domestic trade policies, actions or disputes on the level of trade among the countries and regions in which we operate, the competitiveness of our exports, or our ability to export; the effects of significant foreign conflicts; the loss of, or significant reduction in, purchases by our largest customers; our relationships with, and other conditions affecting our customers and our ability to collect payments from our customers; risks related to our international growth; competition, both within our industry and with producers of competing energy sources, including the effects from any current or future legislation or regulations designed to support, promote or mandate renewable energy sources; alternative steel production technologies that may reduce demand for our coal; our ability to secure new coal supply arrangements or to renew existing coal supply arrangements; cyber-attacks or other security breaches that disrupt our operations, or that result in the unauthorized release of proprietary, confidential or personally identifiable information; our ability to acquire or develop coal reserves in an economically feasible manner; inaccuracies in our estimates of our coal reserves; defects in title or the loss of a leasehold interest; the availability and cost of surety bonds, including potential collateral requirements; we may not have adequate insurance coverage for some business risks; disruptions in the supply of coal from third parties; decreases in the coal consumption of electric power generators could result in less demand and lower prices for thermal coal; our ability to pay dividends or repurchase shares of our common stock according to our announced intent or at all; the loss of key personnel or the failure to attract additional qualified personnel and the availability of skilled employees and other workforce factors; public health emergencies, such as pandemics or epidemics, could have an adverse effect on our business; existing and future legislation and regulations affecting both our coal mining operations and our customers' coal usage, governmental policies and taxes, including those aimed at reducing emissions of elements such as mercury, sulfur dioxides, nitrogen oxides, particulate matter or greenhouse gases; increased pressure from political and regulatory authorities, along with environmental and climate change activist groups, and lending and investment policies adopted by financial institutions and insurance companies to address concerns about the environmental impacts of coal combustion; increased attention to environmental, social or governance matters (“ESG”); our ability to obtain or renew various permits necessary for our mining operations; risks related to regulatory agencies ordering certain of our mines to be temporarily or permanently closed under certain circumstances; risks related to extensive environmental regulations that impose significant costs on our mining operations and could result in litigation or material liabilities; the accuracy of our estimates of reclamation and other mine closure obligations; the existence of hazardous substances or other environmental contamination on property owned or used by us and risks related to tax legislation and our ability to use net operating losses and certain tax credits; All forward-looking statements in this presentation, as well as all other written and oral forward-looking statements attributable to us or persons acting on our behalf, are expressly qualified in their entirety by the cautionary statements contained in this section and elsewhere in this presentation . 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For a description of some of the risks and uncertainties that may affect our future results, you should see the risk factors described from time to time in the reports we file with the Securities and Exchange Commission. Additionally, our discussions of certain ESG matters and issues herein are developed with various standards and frameworks (including standards for the measurement of underlying data), and the interests of various stakeholders. As such, such discussions may not necessarily be “material” under the federal securities laws for SEC reporting purposes. Furthermore, many of our disclosures regarding ESG matters are subject to methodological considerations or information, including from third parties, that is still evolving and subject to change. 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This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA, net cash, free cash flow, free cash flow yield, and modeled discretionary free cash flow. These non-GAAP financial measures are not measures of financial performance in accordance with generally accepted accounting principles and may exclude items that are significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation or as an alternative to cash and cash equivalents, net income, earnings per fully-diluted share or other measures of profitability, liquidity or performance under generally accepted accounting principles. You should be aware that our presentation of these measures may not be comparable to similarly-titled measures used by other companies. A reconciliation of these financial measures to the most comparable measures presented in accordance with generally accepted accounting principles has been included at the end of this presentation.

Arch at a glance

1st

quartile coking coal producer on U.S. cost curve

No. 1

global supplier of premium High-Vol A coking coal

4x

Excellence in safety with incident rate nearly 4x better than U.S. average

Leader

in sustainability, with perfect environmental compliance record in 2023

Decades

of high-quality coking coal reserves that should support low-cost mining at flagship longwall mines through 2050



10 million

tons of annual coking coal production capacity



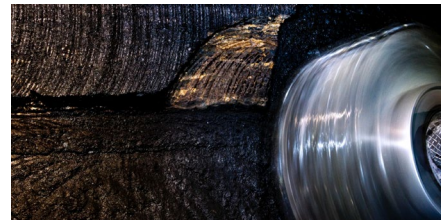
~80%

of metallurgical coal output from world-class longwall mines



Essential

supplier to global steel industry, which is critical to decarbonization plans



>40%

of coking coal sales volumes – and climbing – directed to fast-growing Asian markets



Strategic access

to seaborne thermal markets via West Elk longwall mine

100%

of discretionary capital earmarked for capital return program

\$2.2 billion

deployed in capital return program since initial launch

\$178 million

net positive cash position, with minimal debt

100% funded

thermal mine reclamation fund

\$1.2 billion

in thermal segment-level Adjusted EBITDA less CapEx in past 7 years

Arch's operating profile

MINES BY SEGMENT

METALLURGICAL



- LEER
- LEER SOUTH
- BECKLEY
- MOUNTAIN LAUREL

THERMAL

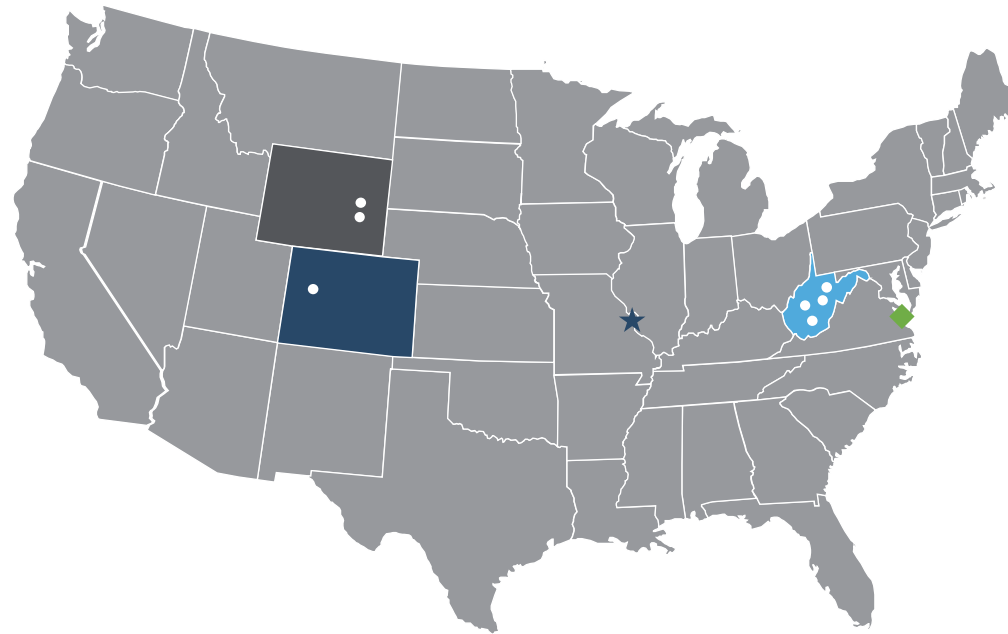


- WEST ELK



- BLACK THUNDER
- COAL CREEK

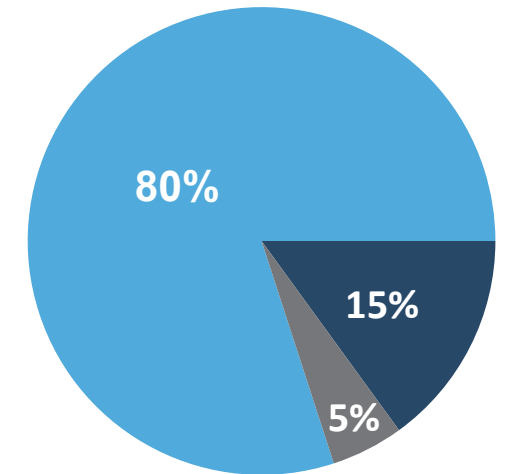
Arch is a premier U.S. producer of high-quality metallurgical coal – a position that is supplemented by a highly competitive legacy thermal segment that generates robust amounts of free cash flow



- ★ HEADQUARTERS
- ◆ DTA (35% equity investment in port)

Arch generates ~80% of its segment-level adjusted EBITDA from metallurgical markets and an incremental 15% from durable export and niche industrial thermal markets

Normalized Segment Adjusted EBITDA



- Metallurgical
- Thermal Export / Industrial
- Thermal Domestic / Power Generation

Note: (1) Percentages are pre-corporate, other and eliminations.
(2) Excludes pass-through tons not assigned a segment.

Arch's simple, consistent strategy for long-term value creation

Maintain a premier, world-class coking coal portfolio

- Position Arch to serve the needs of a growing and decarbonizing global economy
- Optimize / target long-term steady-state coking coal production of 10 million tons annually
- Maintain and further strengthen position in first quartile of the U.S. cost curve

Drive additional free cash flow via thermal assets

- Capitalize on West Elk's durable industrial customer base and competitive seaborne access
- Capture persisting value of Powder River Basin operations

Sustain ample liquidity and a well-fortified balance sheet

- Maintain a net positive cash position and very modest debt load
- Maintain funding for long-term thermal reclamation obligations

Sustain and support a robust capital return program

- Capitalize on powerful cash-generating capabilities and modest future capital needs
- Target deployment of 100% of discretionary cash flow in capital return program
- Emphasize share repurchases while maintaining a meaningful dividend

Build on longstanding position as a leader in sustainability

- Prioritize safety, environmental stewardship, integrity and good corporate citizenship
- Leverage deep and well-established corporate culture grounded in sustainability
- Capitalize on tight alignment of corporate strategy with global decarbonization goals



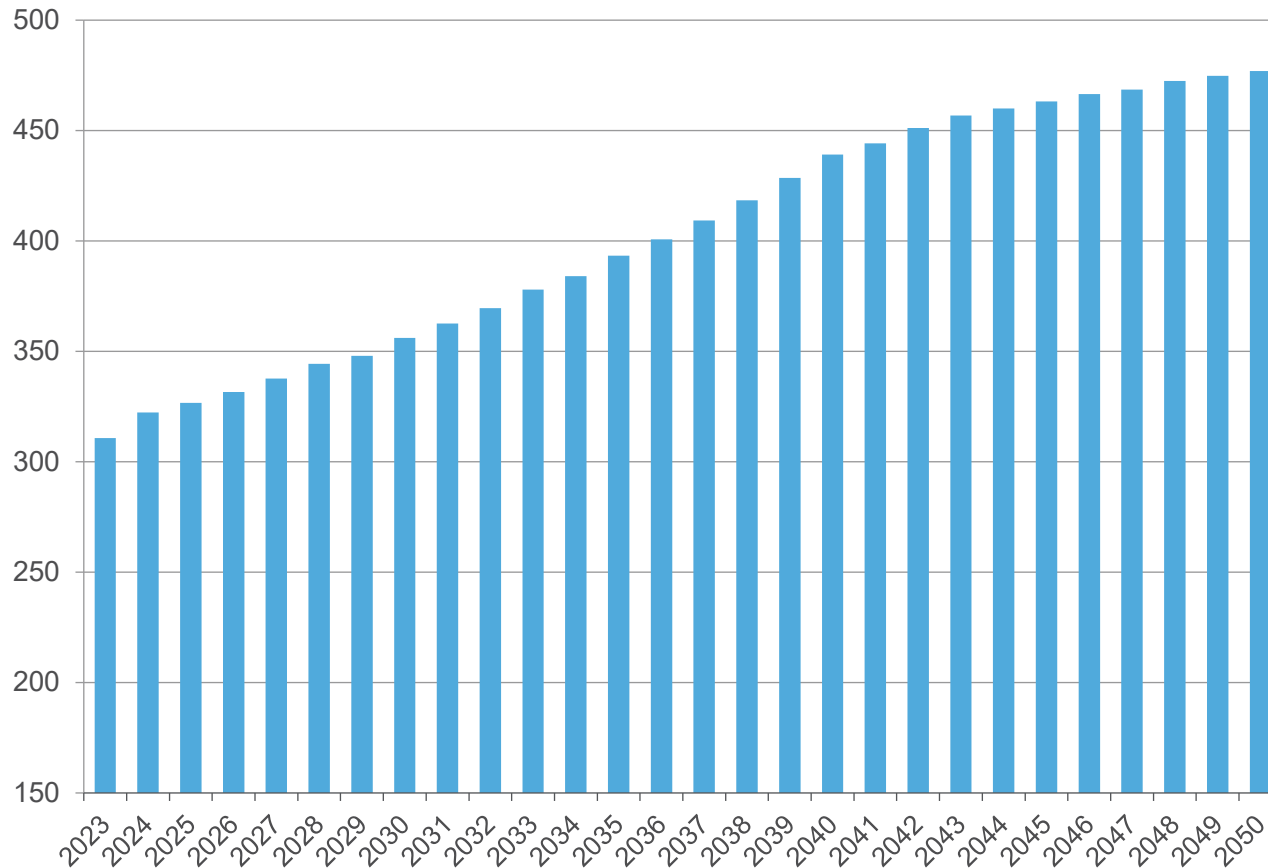
**ARCH
RESOURCES**

INVESTMENT THESIS FOR COKING COAL

Global seaborne demand for metallurgical coal is projected to grow steadily and consistently through mid-century

PROJECTED GLOBAL SEABORNE METALLURGICAL IMPORTS, THROUGH 2050

(in millions of metric tons, per an average of Wood Mackenzie and AME projections)



Global seaborne coking coal demand is projected to continue to climb through 2050, buoyed by continued economic development and urbanization in India and the rest of Southeast Asia

Approximately 60 percent of the world's population lives in Asia, where metallurgical coal demand is centered and where indigenous sources of metallurgical coal are limited

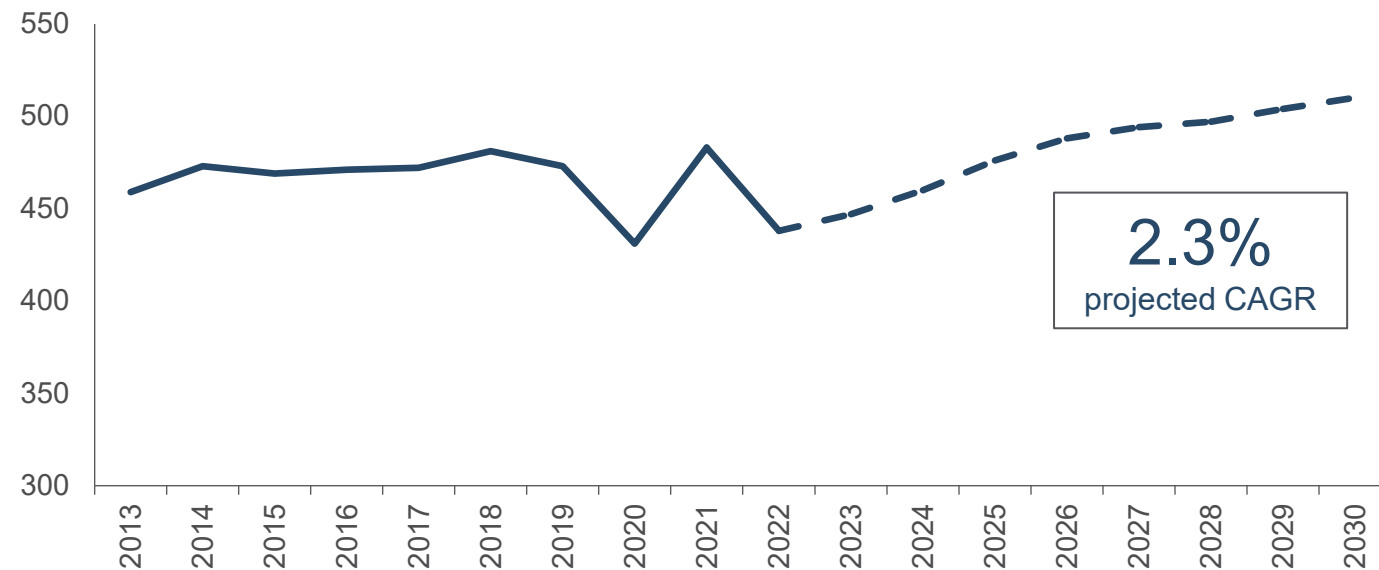
Based on the consensus estimate, demand – in aggregate – will total more than 11 billion tons between now and 2050, which will strain supply availability significantly

Source: Wood Mackenzie, AME, Internal

Hot metal output for the world excluding China is projected to climb, with growth in Asia counterbalancing European erosion

WORLD EX. CHINA HOT METAL PRODUCTION

(historical and consensus projection, in millions of metric tons)



Source for historical data: World Steel Association, internal

* Consensus includes four leading steel industry consulting firms

Global hot metal production for the world excluding China is projected to grow at an average rate of 2.3% per year through 2030, per consensus estimate*

We expect the increase in hot metal production to be supported by new integrated capacity additions in India and Southeast Asia

We project integrated (BF/BOF) steel production gains in the Pacific to more than counterbalance gradual erosion in integrated production in Europe, developed Asia, and North America

For every one ton of growth in global hot metal production, we expect 0.6 tons of growth in global coking coal demand

Metallurgical products are essential to the production of new steel and the construction of a low-carbon economy

The global steel market is ~10 times larger in volume than all other metals markets combined, and the world's drive to build a low-carbon economy hinges on ample steel supplies. Coking coal is an essential input in the production of ~70% of the world's steel output and will remain indispensable for decades.

Mass Transit



Wind Turbines



Electric Vehicles



Coking coal is a linchpin of the global energy transition

>50%

Projected annual increase in global seaborne metallurgical coal demand by 2050, per consensus

\$237

Average benchmark price per metric ton of coking coal since 2010

2.3%

Projected annual growth rate for hot metal for the world excluding China, through 2030

Record Demand

The world consumed ~8.5 billion tons of coal in 2023, an all-time high

10x

The global steel market is 10 times larger by volume than all other metals markets combined



>70%

Percentage of total global steelmaking capacity using integrated technology, which requires coking coal



1 billion

The global automotive fleet is expected to grow by ~1 billion vehicles by 2050



2.5 billion

Projected increase in the number of people living in urban areas – where steel use intensity is highest – by 2050



60%

Percentage of world's population living in Asia, where steel demand is growing rapidly and scrap availability is limited



45%

Projected growth in steel production in Southeast Asia by 2030

70

Number of vehicles per 1,000 people in India – and 200 in China – versus 850 in the U.S.

~275

tons of steel required to build one modern wind turbine

Essential

It takes an average of 0.6 tons of coking coal to produce one ton of new steel

>80%

Percentage of new steelmaking capacity in India and Southeast Asia using blast furnace technology

>100 million

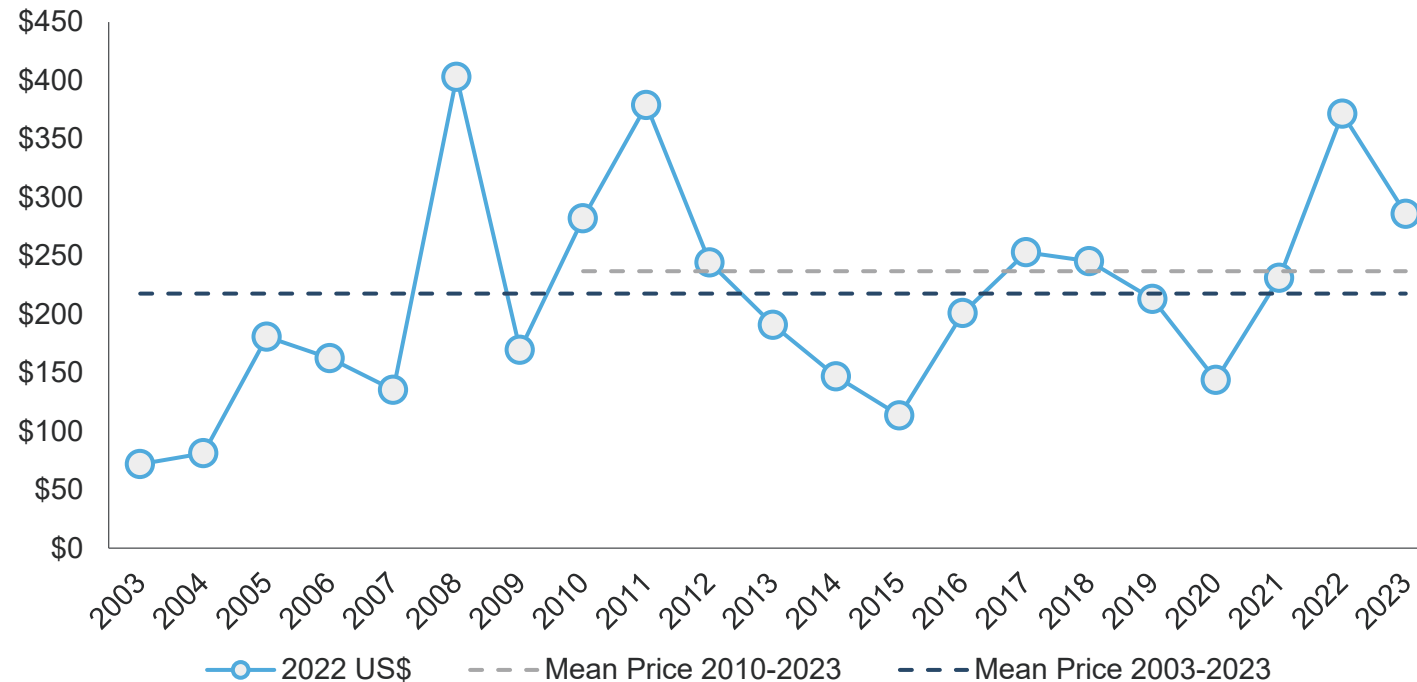
tons of new, integrated, annual steelmaking capacity planned for India and Southeast Asia by 2030

Sources: Wood Mackenzie, United Nations, U.S. Department of Transportation, International Energy Agency, World Steel Association, U.S. Energy Information Administration, Vestas and Internal

Long-run coking coal price continues to shift higher on limited new investment and other supply pressures

ANNUAL AVERAGE QUEENSLAND HARD COKING COAL PRICE

(US\$ per metric ton, inflation adjusted)



Arch expects volatility to continue, but with an upward bias, as mining costs increase due to reserve degradation and depletion; under-investment; and increasing royalties and regulatory costs

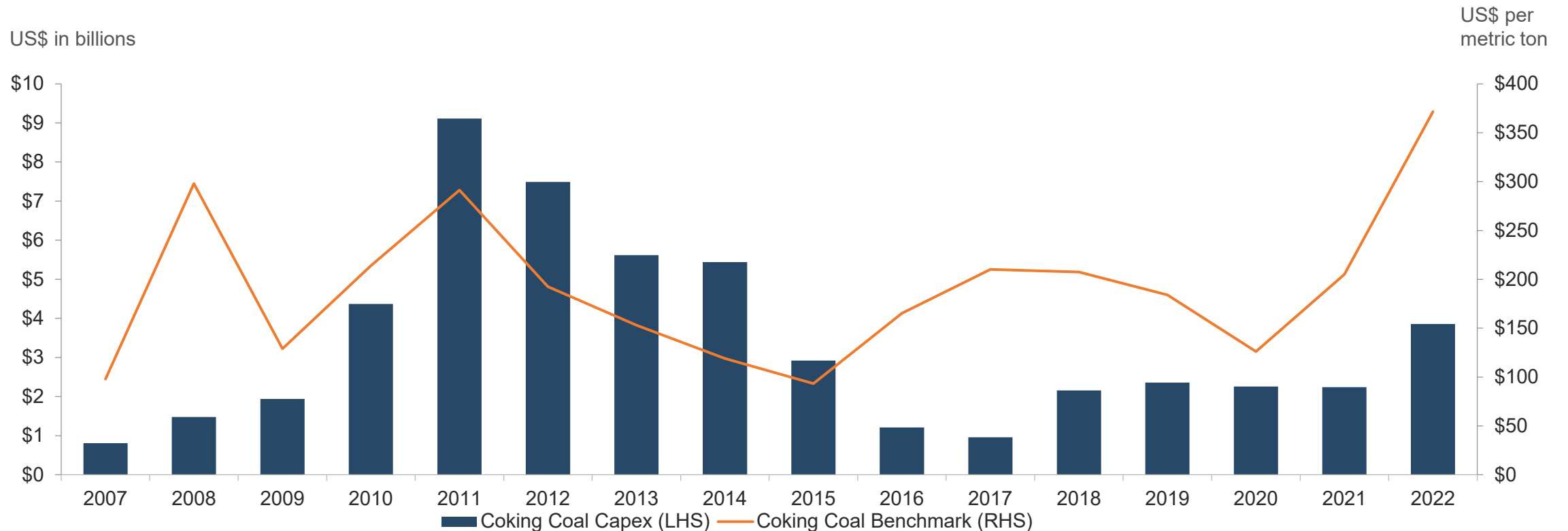
- The coking coal benchmark has averaged \$218 per metric ton on an inflation-adjusted basis since 2003
- Since 2010, the average price has been \$237 per metric ton on an inflation-adjusted basis

Source: Bloomberg, Public Information, BLS, Internal
Note: 2022 real dollars

Underinvestment in global coking coal supply continues, even in the face of an extended period of strong pricing

DEVELOPMENT CAPEX FOR SEABORNE COKING COAL MINES

(US\$ in billions and per metric ton)



Source: Wood Mackenzie, Bloomberg, Internal

Global coking coal investment and production have peaked

Supplier	Peak Year	Peak Exports (mt)	2023 Exports (mt)	2023 Change from Peak (mt)	2023 Change from Peak (%)
Australia	2016	189.2	151.3	(38.0)	(20.1%)
Canada	2013	35.0	30.6	(4.4)	(12.5%)
Unites States	2012	63.4	46.5	(16.9)	(26.6%)
Cumulative	2014	273.3	228.4	(44.9)	(16.4%)

Source: Customs data, GTT



**ARCH
RESOURCES**

ARCH'S PREMIER METALLURGICAL FRANCHISE

Arch is a premier supplier of coking coal globally

Arch has a world-class coking coal portfolio that ranks in the first quartile of the U.S. cost curve

- Arch derives approximately 80% of its annual coking coal production from large, highly efficient longwall operations
- We maintain a cost profile that is an estimated \$50 per ton lower than the marginal cost of production for U.S. coking coal producers

Arch is the No. 1 global supplier of premium, High-Vol A coking coal

- Arch supplies approximately 30% of the world's High-Vol A coking coal
- High-Vol A coking coal typically trades at a premium to other U.S. coking coals in the marketplace
- Arch's High-Vol A coking coal is highly sought-after in marketplace due to its high Coke Strength after Reaction (CSR) and superior blending properties

Arch is a widely recognized, longstanding leader in sustainability

- Arch has maintained a safety record that is nearly four times better than the U.S. coal industry average
- Arch had a perfect environmental compliance record in 2023
- Arch has reduced its Scope 1 and Scope 2 CO₂e emissions by nearly 50% since its 2011 baseline year

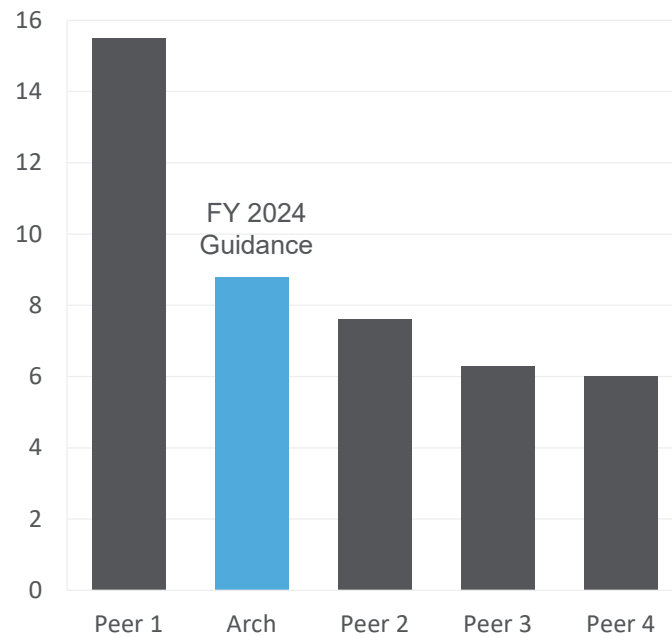
Arch has an extensive reserve base of high-quality coking coal that can support low-cost mining for decades

- Each of Arch's four coking coal mines have dedicated reserves that can support low-cost mining for 20 years or more
- The yet-to-be-assigned reserves in the Leer reserve base provide future optionality for another low-cost longwall mine or – conversely – an additional 20-plus years of mining at Arch's flagship Leer and Leer South longwall operations

Arch is a low-cost coking coal producer with the world's No. 1 High-Vol A coking coal franchise

ESTIMATED U.S. METALLURGICAL COAL OUTPUT BY PRODUCER

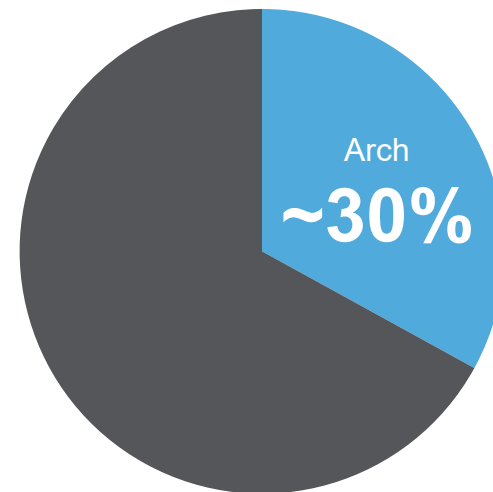
(in millions of tons, based on 2023 volumes)



Source: Public Information, MSHA, Internal; peer group = Alpha, Blackhawk, Coronado, Warrior (listed here alphabetically)
 Note: production from identified coking coal mines

ARCH'S SHARE OF GLOBAL HIGH-VOL A MARKET

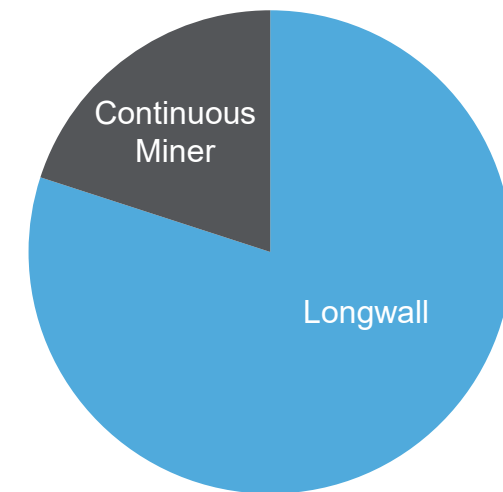
(estimate based on 2023 sales)



Arch supplies roughly 30% of the world's High-Vol A coking coal, which has significant value-in-use as a blending agent with lesser-quality coals, while also furnishing high Coke Strength after Reaction (CSR)

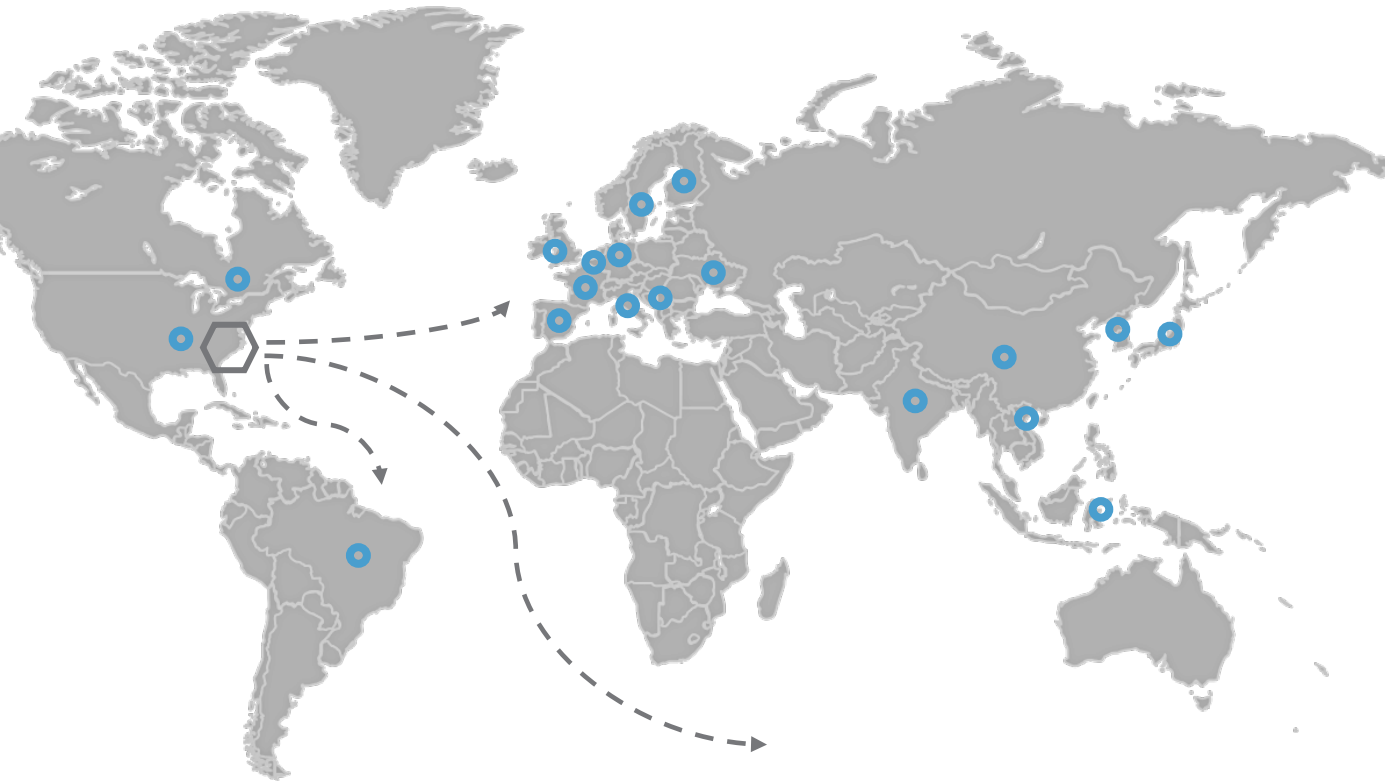
ARCH'S COKING COAL OUTPUT BY TECHNOLOGY

(percentage of 2023 sales)



Roughly 80% of Arch's coking coal output comes from low-cost longwall operations, versus ~30% for the U.S. industry as a whole

Robust market penetration to meet global demand

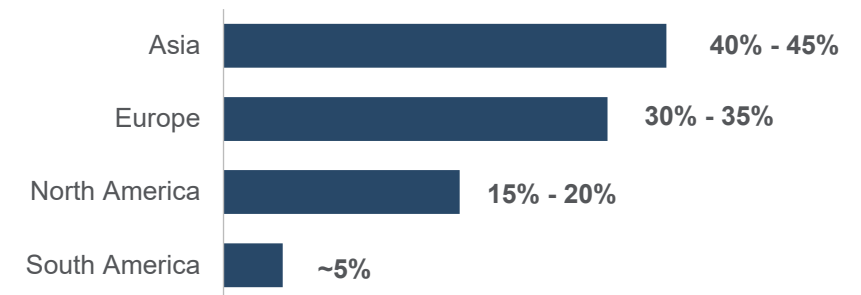


STRONG CUSTOMER RELATIONSHIPS AND TRANSPORT AGREEMENTS

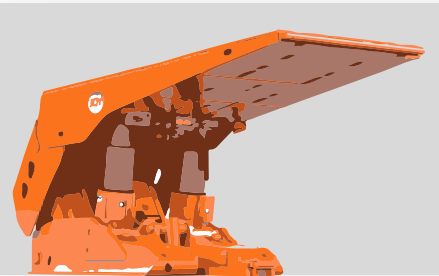
Arch plans to sell more than 80 percent of its 2024 coking coal output into the 300-million-metric-ton-per-year global seaborne metallurgical marketplace

- Arch has strong, direct, longstanding relationships with many of the world's largest steelmakers
- Arch has rail and terminal agreements – as well as a 35% interest in DTA in Newport News – to facilitate export shipments

ARCH'S PROJECTED 2024 METALLURGICAL SHIPMENTS BY REGION

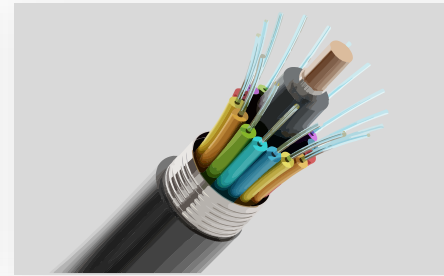


Arch is focused on optimizing output, managing costs, and driving productivity gains across its coking coal portfolio



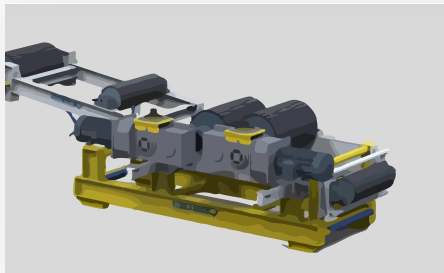
Autonomous Operation

Remote Operation
Shield Proximity
Camera Monitoring



Advanced Communications

Wi-Fi Connected Equipment
Extensive In-Mine Fiber-Optic Networks



Strategic Diagnostics

Acceptance Testing
Motion Amplification



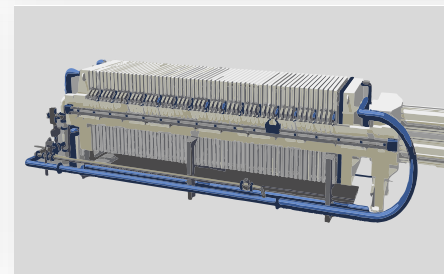
Precision Mining

Laser-Enabled Face Alignment



Predictive Maintenance

Vibration Analysis
Thermographic Analysis
Ultrasonic Detection



Precision Processing / Quality Control

Advanced Processing Facilities
Ultrafine Filter Press



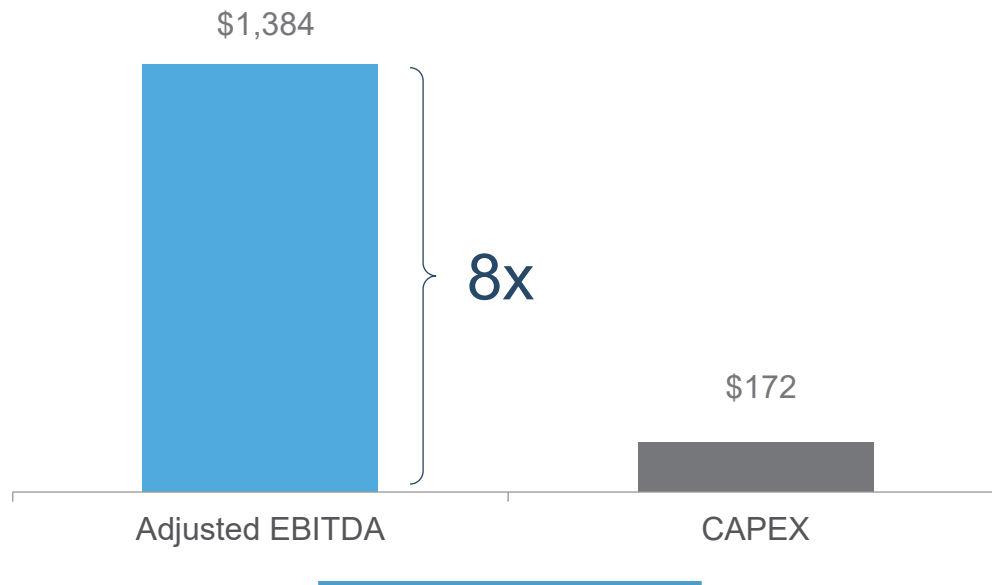
**ARCH
THERMAL**

ARCH'S COMPETITIVE THERMAL FRANCHISE

Arch's thermal franchise generates significant cash, and is expected to continue to do so for many more years

THERMAL SEGMENT ADJUSTED EBITDA SIGNIFICANTLY HIGHER THAN CAPEX SINCE Q4 2016

(in millions of dollars)

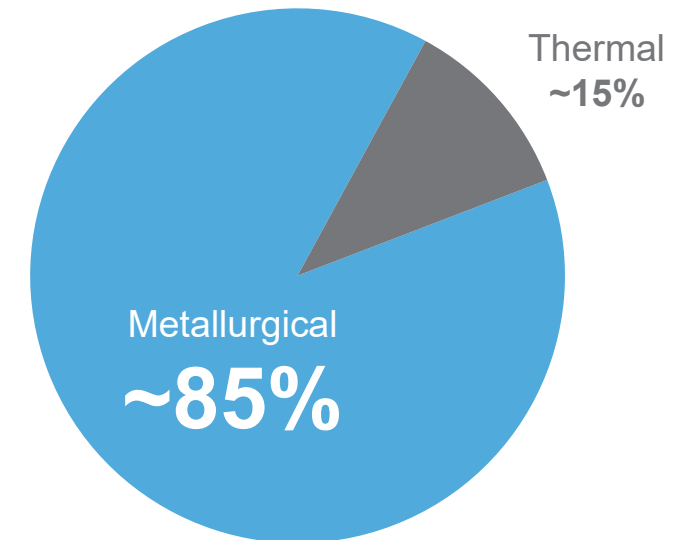


Thermal segment Adjusted EBITDA has greatly exceeded capital spending as Arch has capitalized on the durable cash-generating capacity of the West Elk mine; harvested the persisting value of the Powder River Basin assets; and systematically reduced its PRB footprint while building a substantial thermal mine reclamation fund in preparation for ultimate closure

ARCH CAPITAL SPENDING FOCUSED ON METALLURGICAL COAL

(percentage by segment, since Q4 2016)

Arch expects to continue to direct the vast majority of its capital spending to its core metallurgical segment in future periods



West Elk should have significant economic longevity given its access to seaborne markets and its niche industrial customer base

West Elk is a key source of supply for several large domestic industrial facilities that currently plan to maintain their reliance on thermal coal for the intermediate to long term

- Other sources of western bituminous coal have shuttered or appear to be in decline
- Exploring the possibility of longer-term, baseload supply agreements with coal-reliant industrial facilities

West Elk coal is highly desirable in seaborne thermal coal markets, and the mine has the logistical means to move volumes both West and East when the seaborne window is open

- Coal quality is superior to the Australian thermal benchmark product, with lower ash, lower sulfur and higher calorific value
- Access to significant throughput capacity for both Pacific and Atlantic seaborne movements
- Soon expected to transition to an area of the reserve base with even higher coal quality

West Elk is expected to contribute ~75% of the Adjusted EBITDA from Arch's thermal segment in future years

West Elk should continue to generate healthy margins into the future, despite ongoing declines in thermal coal demand from U.S. power generators





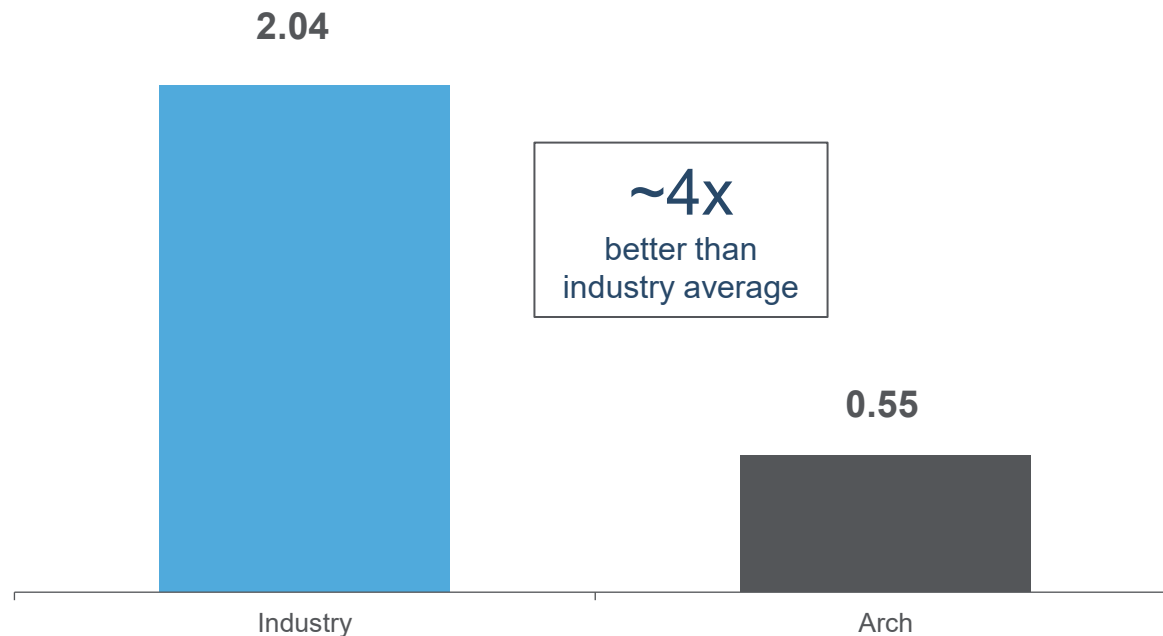
ARCH SUSTAINABILITY

ARCH'S SUSTAINABILITY LEADERSHIP

Arch is a demonstrated and longstanding leader in both safety and environmental stewardship

Safety performance far better than the industry average

(lost-time incident rate per 200,000 employee-hours worked in 2023)



Zero

Number of SMCRA violations in 2023, versus a five-year average of 11 apiece by 10 large competitors, according to publicly available data

100%

Compliance rate for water discharges for four years and counting

Level A

The Leer mine recently became the first U.S. mine of any type to achieve third-party Level A verification under the globally recognized Towards Sustainable Mining (TSM) framework

Our value creation strategy and ESG commitment are aligned via our strategic shift towards global steel and metallurgical markets

Arch is the sole U.S. coking coal producer to join ResponsibleSteel™, aligning with steel customers to support their long-term decarbonization efforts

- Supplier of choice to the world's largest and most successful steel producers
- First global, multi-disciplinary, ESG-driven, steel industry certification initiative

With our transition, Arch's operations have become significantly more climate-compatible

- Scope 1 and Scope 2 CO₂-e absolute emissions have declined by an estimated 47 percent since 2011
- Scope 3 emissions from sold products are believed to have declined markedly in accordance with reduced thermal sales volumes
- Aggressively pursuing further reductions through efficiency measures





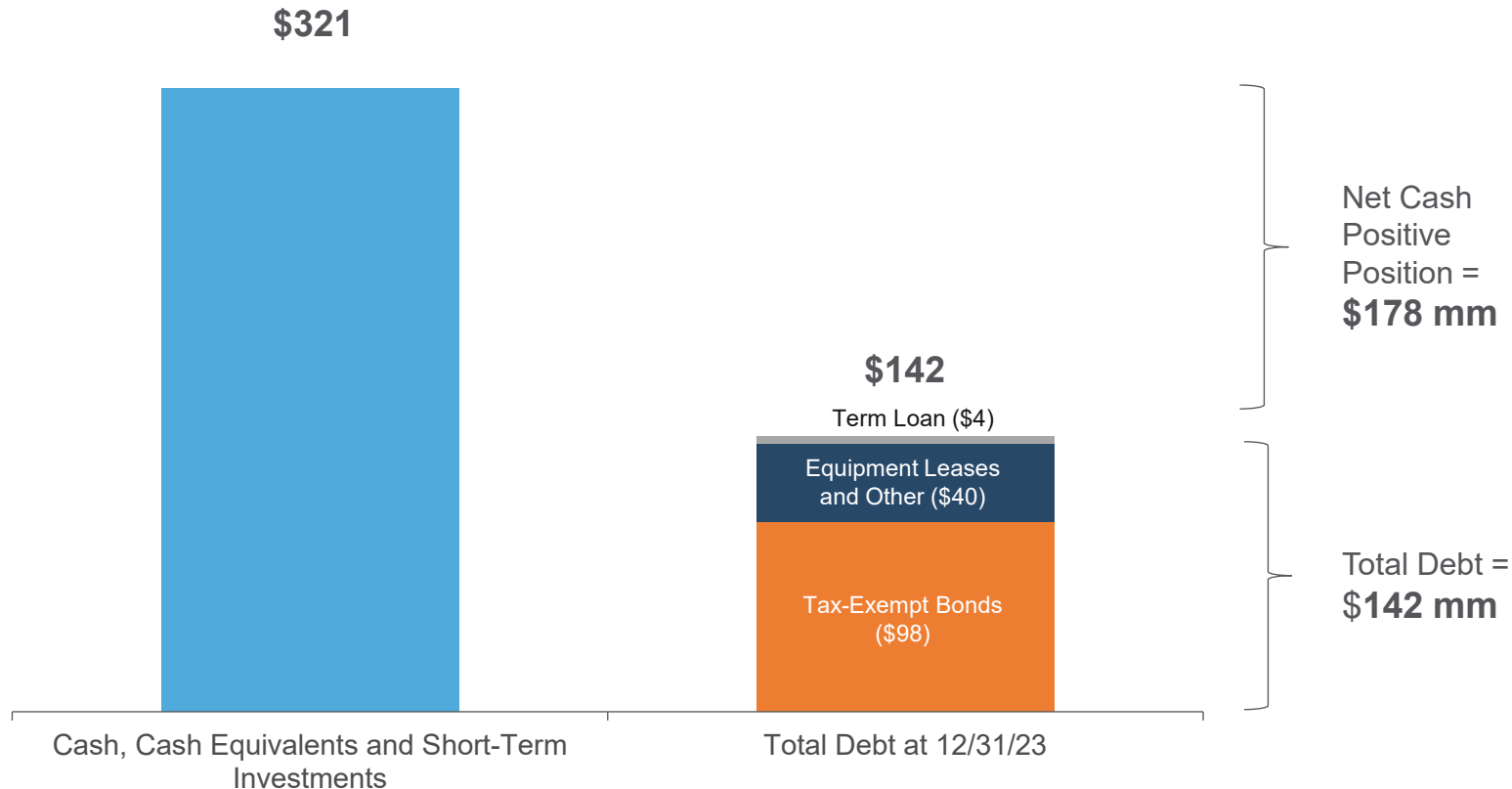
**ARCH
FINANCE**

**STRONG FINANCIAL POSITION
AND CAPITAL ALLOCATION PRIORITIES**

Fortifying the balance sheet

CASH AND LIQUIDITY LEVEL VERSUS TOTAL DEBT

(at 12/31/23, in millions)



Arch has reduced its indebtedness by ~80% since year-end 2021, and its modest remaining indebtedness carries a blended annual interest rate of ~6%

Subsequent to 12/31/23, Arch replaced its existing term loan with a new \$20 million facility

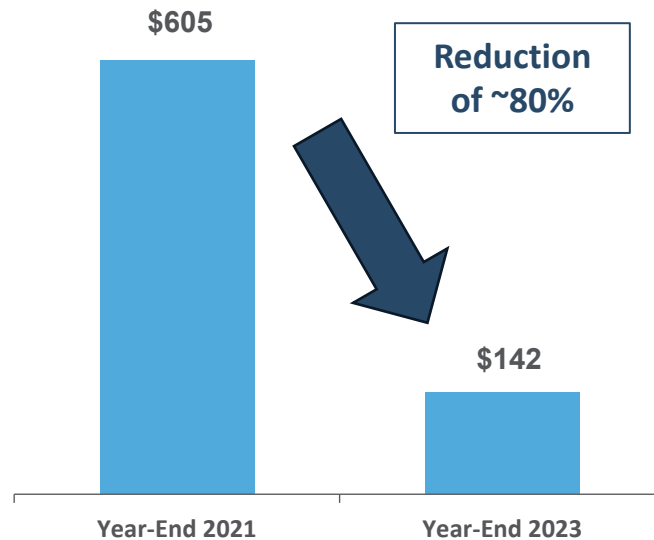
Arch's current annual interest income is expected to counterbalance its modest annual interest expense

Arch has built the balance in its industry-first thermal mine reclamation fund to \$142 million, largely defeasing its anticipated Powder River Basin asset retirement obligation, which represents the vast majority of total ARO

Arch has deployed more than \$2.2 billion in its capital return program to date, and plans to continue to return 100% of discretionary cash flow to shareholders going forward

TOTAL DEBT*

(in millions of dollars)



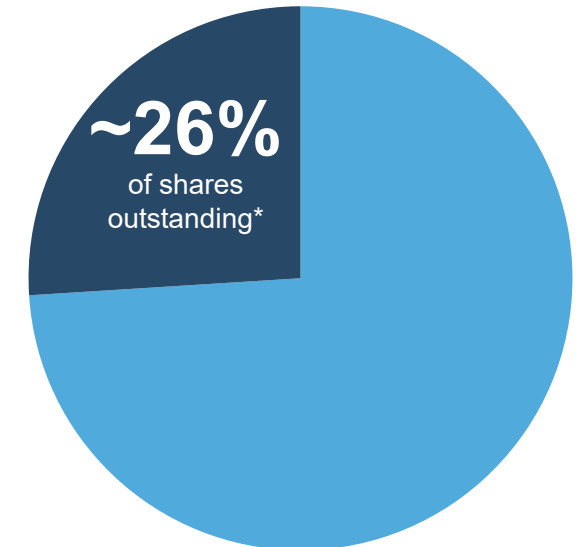
Arch has reduced debt by nearly 80% since year-end 2021, while at the same time building its thermal mine reclamation fund to \$142 million, or 100% of its initial target level

* Represents the principal amount outstanding

\$2.2 bn

Since May 2017 – and inclusive of both phases of its capital return program – Arch has deployed \$2.2 billion in its capital return program, including \$1.1 billion in share repurchases (at an aggregated average cost of \$90.98 per share) and \$792.1 million in dividends

REDUCTION IN SHARE COUNT



Arch has used common stock and convertible notes repurchases to reduce share count by 6.4 million shares, or ~26%, since the capital return program's initiation

* Inclusive of projected unwind of capped calls in Q1 2024, per recent guidance

Arch has the potential to generate significant discretionary free cash flow yields across a range of share price scenarios

MODELED FREE CASH FLOW YIELD

(based on FY24 consensus* Adjusted EBITDA estimates, in millions except where indicated)

Hypothetical Price Per Share	\$160	\$180	\$200
Diluted Shares Outstanding	18.6*	18.6*	18.6*
Total Market Capitalization	\$2,976	\$3,348	\$3,720
Consensus Adjusted EBITDA (at 2/19/24)	\$671	\$671	\$671
Capital Spending Guidance	\$165	\$165	\$165
Projected Debt Service	\$20	\$20	\$20
Projected Cash Taxes	\$5	\$5	\$5
Modeled Discretionary Free Cash Flow	\$481	\$481	\$481
Modeled Discretionary Free Cash Flow Yield	16.2%	14.4%	12.9%

The central tenet of Arch's capital allocation formula is the targeted return of 100% of discretionary free cash flow to shareholders

- At present, the capital return program is weighted to a return of 75% of discretionary free cash flow in the form of share repurchases, with the remaining 25% being returned in the form of dividends
- Based on this formula and the FY24 consensus Adjusted EBITDA data, share repurchases could exceed 10% of shares outstanding during 2024 based on the current share price
- Incremental reductions in the share count – while holding future financial expectations constant – would result in steady increases in the overall modeled free cash flow yield

* Reflects pro forma share count post the expected Q1 unwind of Arch's capped calls, per recent guidance

Source for FY24 Adjusted EBITDA consensus data: Bloomberg



ARCH RESOURCES

IN SUMMARY

Arch's Value Proposition

Premier Metallurgical Franchise



Well-Positioned to Attractive Steel and Metallurgical Coal Markets



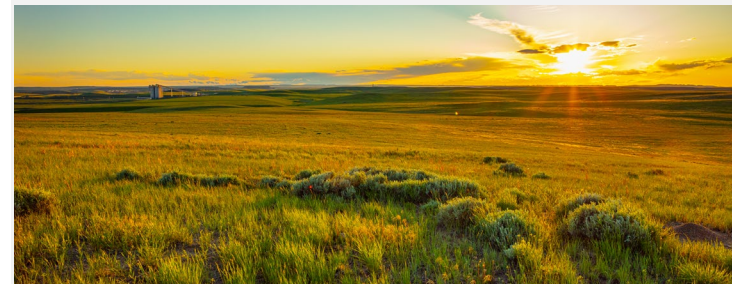
Cash-Generative Thermal Franchise



Strong Financial Position and Capital Allocation Priorities



Sustainability Leadership that Supports Success



Key value drivers

Premier U.S. metallurgical producer with low-cost, high-quality, long-lived asset base

Large-scale, first-quartile metallurgical franchise anchored by two world-class longwall mines

Leading global producer of High-Vol A products that earn a premium in the marketplace

Diverse, highly-rated steel industry customer base across the globe

Significant thermal franchise that contributes robust, supplemental free cash flow, with expected longevity via access to seaborne and niche industrial markets

Strong balance sheet with more cash than debt, no near-term debt maturities, and significant liquidity

Proven commitment to capital returns via a robust, multi-faceted capital return program

Experienced management team with proven track record in safety, environmental stewardship, operational excellence and fiscal prudence

Reconciliation of Non-GAAP measures

Included in this presentation, we have disclosed certain non-GAAP measures as defined by Regulation G. The following reconciles these items to net income (loss) as reported under GAAP. Adjusted EBITDA is defined as net income attributable to the Company before the effect of net interest expense, income taxes, depreciation, depletion and amortization, accretion on asset retirement obligations, amortization of sales contracts and non-operating expenses. Adjusted EBITDA may also be adjusted for items that may not reflect the trend of future results by excluding transactions that are not indicative of the Company's core operating performance.

Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded from Adjusted EBITDA are significant in understanding and assessing our financial condition. Therefore, Adjusted EBITDA should not be considered in isolation, nor as an alternative to net income, nor as a measure of our profitability, liquidity or performance under generally accepted accounting principles. The Company uses Adjusted EBITDA to measure the operating performance of its segments and allocate resources to the segments. Furthermore, analogous measures are used by industry analysts and investors to evaluate our operating performance. Investors should be aware that our presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The table below shows how we calculate Adjusted EBITDA.

	Year Ended	Year Ended	Year Ended	Year Ended	Year Ended	Year Ended	Year Ended	Period from					
	12/31/23	12/31/22	12/31/21	12/31/20	12/31/19	12/31/18	12/31/17	10/2/16-12/31/16	Segment Adjusted EBITDA	MET	Thermal	Corporate and Other	Consolidated
(In thousands)													
Net income (loss)	\$ 464,038	\$ 1,330,914	\$ 337,573	\$ (344,615)	\$ 233,799	\$ 312,577	\$ 238,450	\$ 33,449	Year Ended December 31, 2023	\$ 717,834	\$ 125,469	\$ (129,261)	\$ 714,042
Income tax provision (benefit)	87,514	(251,926)	1,874	(7)	248	(52,476)	(35,255)	1,156	Year Ended December 31, 2022	1,021,932	353,884	(115,384)	1,260,432
Interest expense, net	(2,438)	13,162	23,344	10,624	6,794	13,689	24,256	10,754	Year Ended December 31, 2021	442,830	175,709	(85,109)	533,430
Depreciation, depletion and amortization	146,418	133,300	120,327	121,552	111,621	130,670	176,449	33,401	Year Ended December 31, 2020	91,322	34,035	(101,614)	23,743
Accretion on asset retirement obligations	21,170	17,721	21,748	19,887	20,548	27,970	30,209	7,633	Year Ended December 31, 2019	305,363	152,023	(94,219)	363,167
Asset Impairment and restructuring	-	-	-	221,380	-	-	-	-	Year Ended December 31, 2018	349,524	195,145	(106,891)	437,778
Gain on property insurance recovery related to Mountain Laurel longwall	-	-	-	(23,518)	-	-	-	-	Year Ended December 31, 2017	243,616	260,888	(84,807)	419,697
Loss (Gain) on divestitures	-	-	24,225	(1,505)	13,312	-	(21,297)	-	October 2 through December 31, 2016	30,819	86,924	(23,278)	94,465
Net loss resulting from early retirement of debt and debt restructuring	1,126	14,420	-	-	-	485	2,547	-	Since Emergence	\$ 3,203,240	\$ 1,384,077	\$ (740,563)	\$ 3,846,754
Non-service related postretirement benefit costs	(3,786)	2,841	4,339	3,884	2,053	3,202	1,940	(32)					
Reorganization items, net	-	-	-	(26)	(24)	1,661	2,398	759					
Costs associated with proposed joint venture with Peabody Energy	-	-	-	16,087	13,816	-	-	-					
Preference Rights Lease Application settlement income	-	-	-	-	(39,000)	-	-	-					
Fresh start coal inventory fair value adjustment	-	-	-	-	-	-	-	7,345					
Adjusted EBITDA	714,042	1,260,432	533,430	23,743	363,167	437,778	419,697	94,465					
EBITDA from idled or otherwise disposed operations	15,986	(828)	2,469	15,858	12,926	2,492	3,253	1,596					
Selling, general and administrative expenses	98,871	105,355	92,342	82,397	95,781	100,300	87,952	23,193					
Other	14,404	10,857	(9,702)	3,359	(14,488)	4,099	(6,398)	(1,511)					
Reported segment Adjusted EBITDA from coal operations	\$ 843,303	\$ 1,375,816	\$ 618,539	\$ 125,357	\$ 457,386	\$ 544,669	\$ 504,504	\$ 117,743					



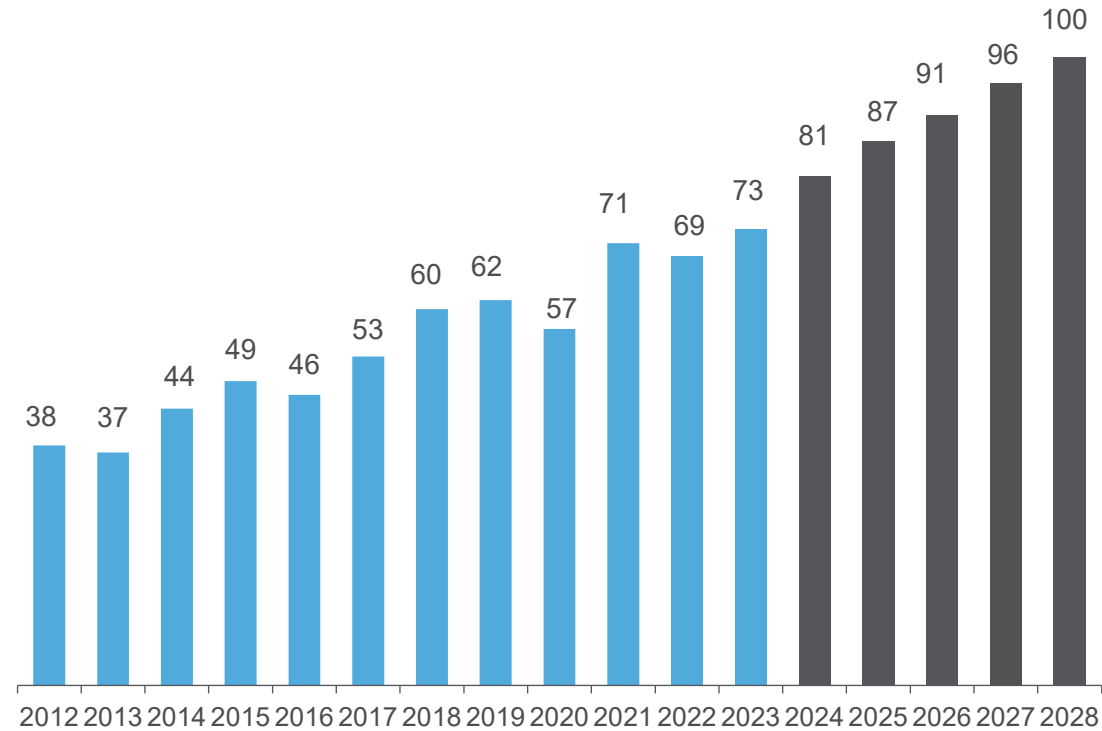
ARCH RESOURCES

APPENDIX: DEEPER DIVE INTO GLOBAL
COKING COAL MARKET DYNAMICS

Indian metallurgical coal imports poised to continue their upward momentum, supported by steel capacity additions

INDIAN METALLURGICAL COAL IMPORTS

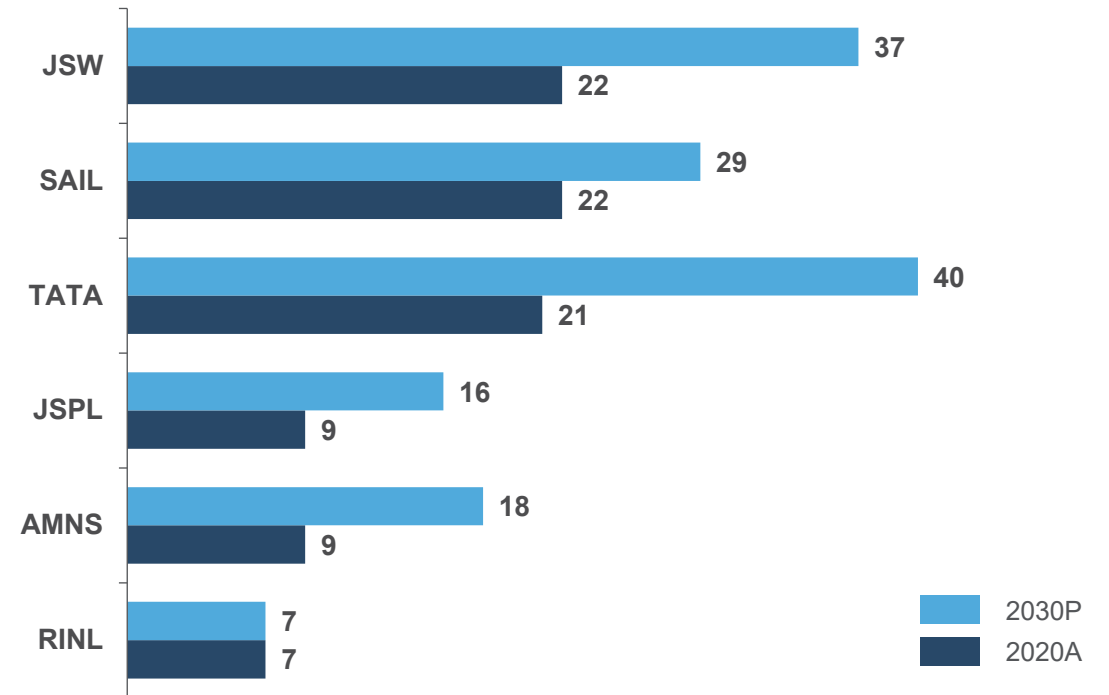
(actual and projected, in millions of metric tons)



Source: GTT, Company Filings, Consensus Data, Internal

PLANNED BF/BOF CAPACITY ADDITIONS

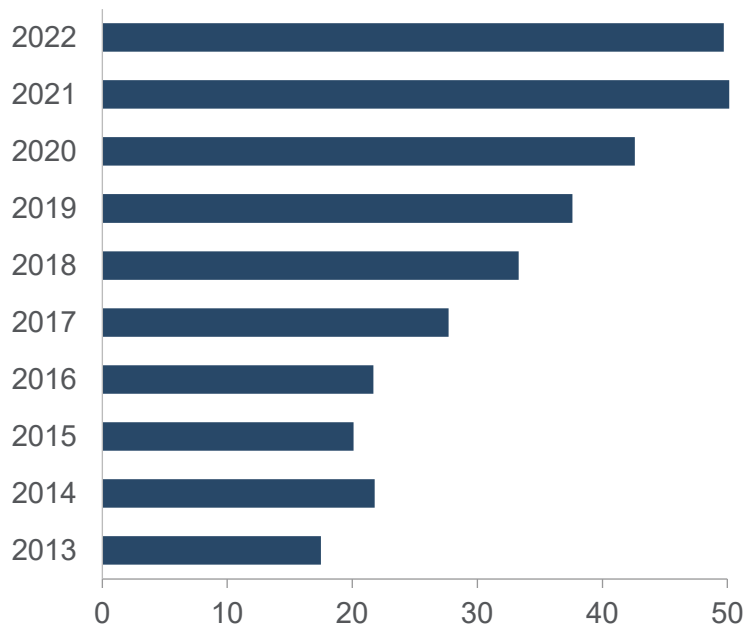
(in millions of metric tons)



Near- and intermediate-term steel capacity growth in Southeast Asia is projected to be significant and largely integrated

SOUTHEAST ASIA CRUDE STEEL PRODUCTION

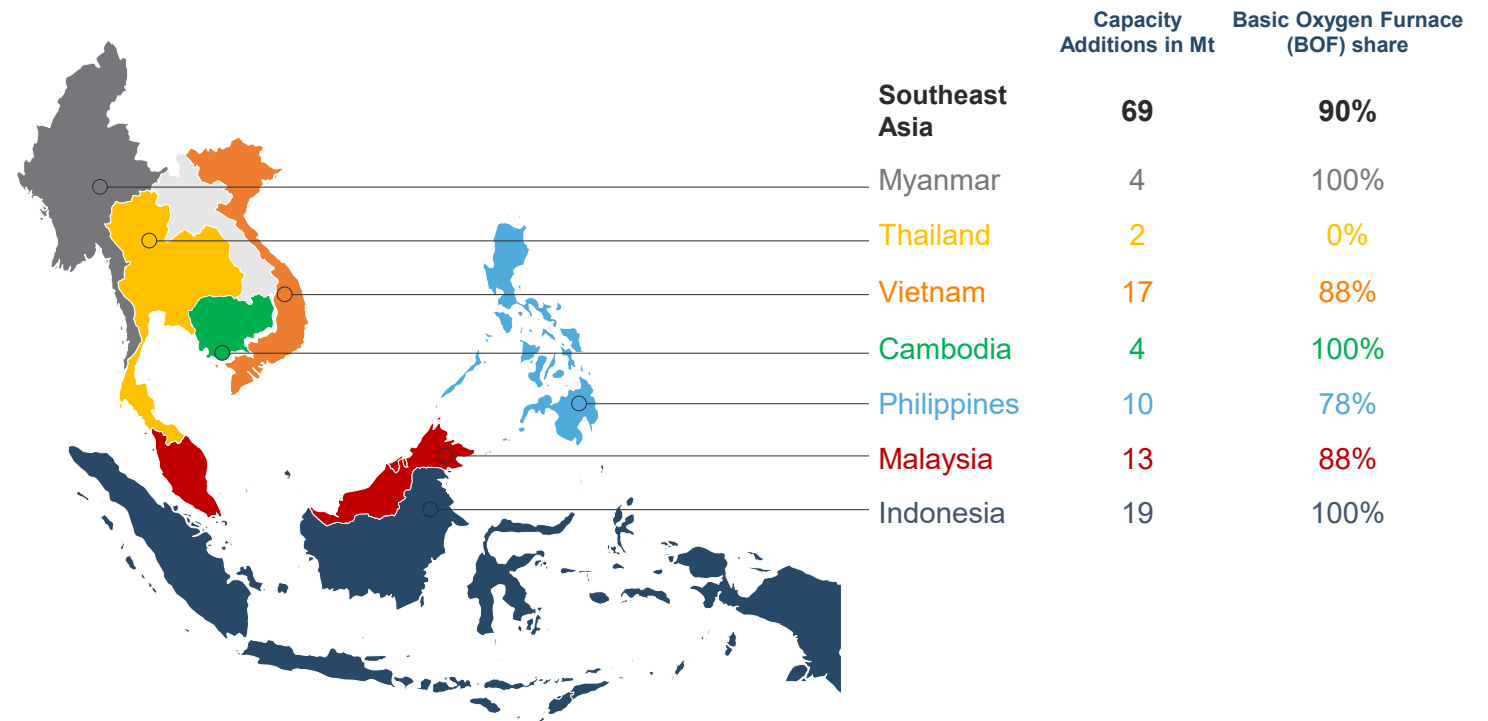
(in millions of metric tons)



Source: World Steel Association, Wood Mackenzie, Internal

POTENTIAL INCREMENTAL STEEL CAPACITY ADDITIONS, BY TECHNOLOGY

(in millions of metric tons)

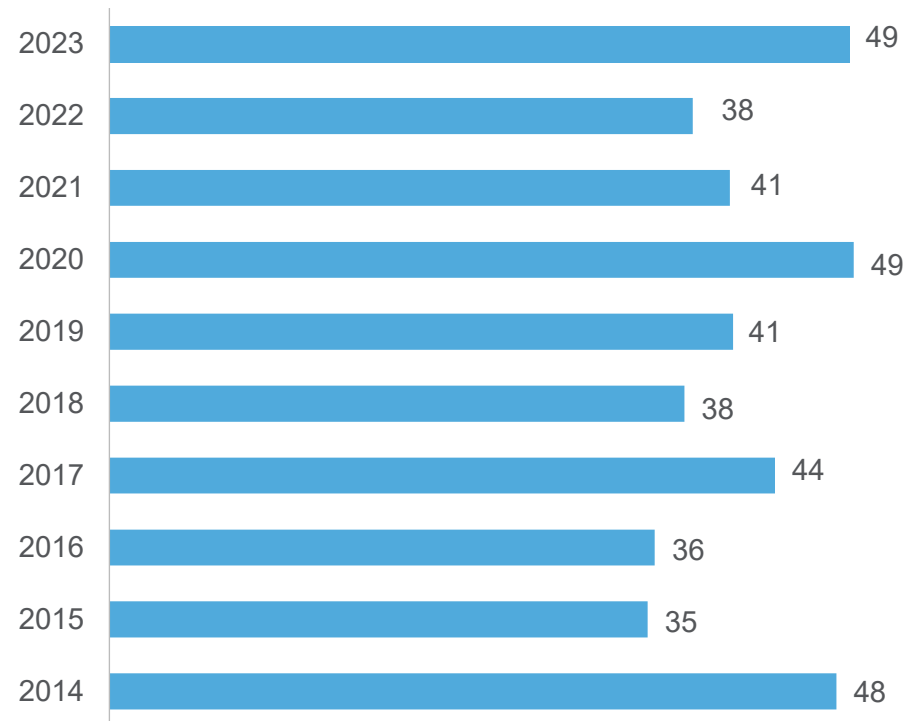


Wood Mackenzie projects that Southeast Asia's steel production will grow by more than 45% by 2030 – from 53 million tons to 78 million tons – mostly via the BOF route

China is expected to remain a significant player in the seaborne metallurgical market

CHINESE SEABORNE COKING COAL IMPORTS

(in millions of metric tons)



Source: China Trade Data, Internal

Note: some volumes of Russian coking coal transit by land to China

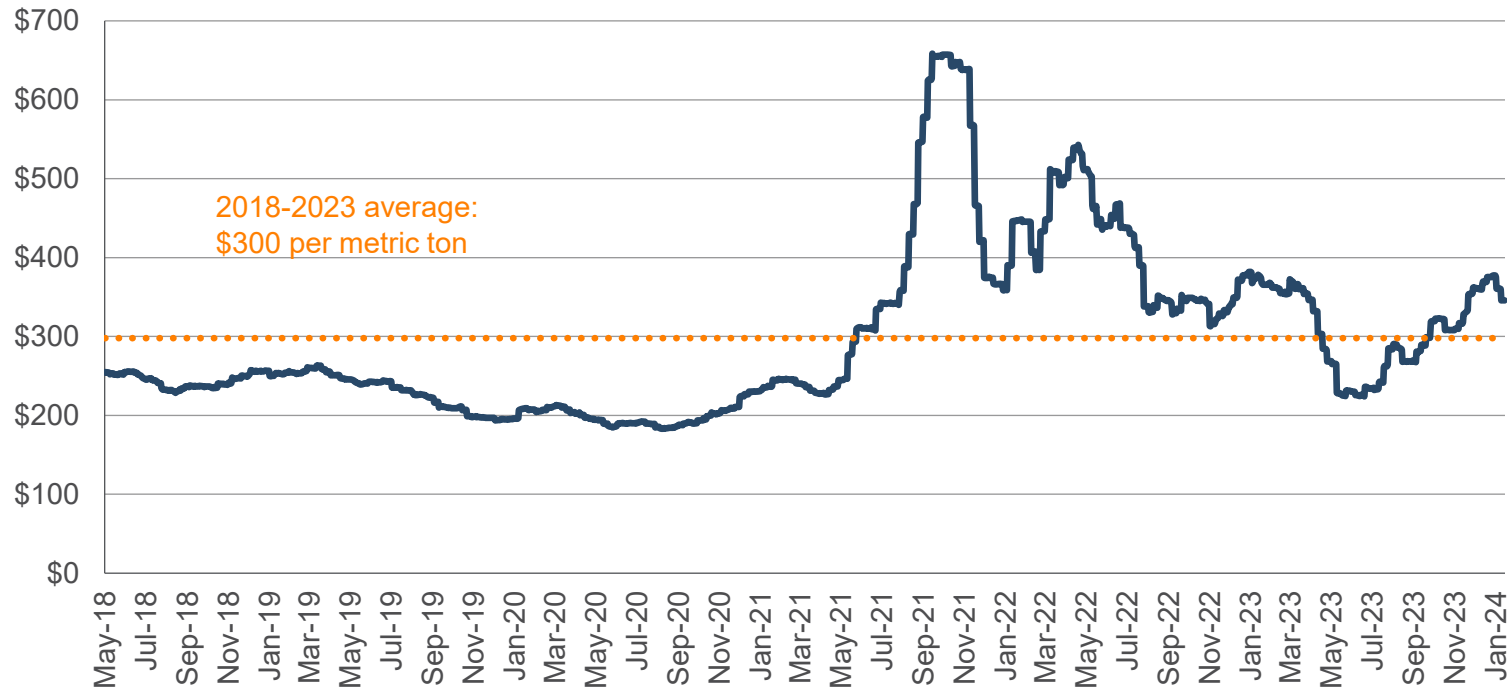
Chinese seaborne coking coal imports – which currently represent approximately 15% of total seaborne coking coal demand – have remained relatively stable in recent years

- China has imported an average of 42 million metric tons of seaborne coking coal per year since 2015
- While China may have reached peak steel consumption, Arch expects Chinese mills to continue to import a comparable level of seaborne coking coal – if not more – going forward
- China has produced well over 5 billion tons of its own coking coal reserves since the year 2000, which has resulted in significant degradation and depletion of that reserve base
- Arch expects China to remain a significant player in the seaborne metallurgical market due to a lack of high-quality indigenous material, rising production costs, and logistical advantages associated with an increasingly coastal steel mill fleet
- While China is currently buying large volumes of Russian coals at a discount, we expect Chinese mills to maintain or even increase their reliance on higher-quality imported coking coal over time

Premium, indigenous Chinese coking coals have traded at an average price of \$300 per metric ton over the past six years

CHINA DOMESTIC METALLURGICAL COAL PRICES

(US\$ per metric ton)



Source: Platts, Internal

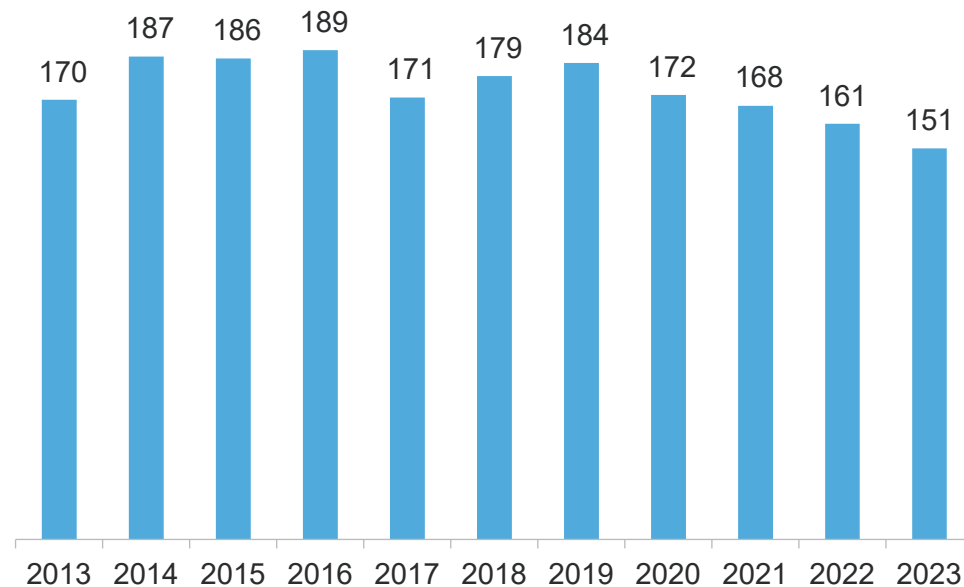
China's premium domestic coking coal has averaged around \$300 per metric ton over the past six years

- We view this trend as an indication of the increasing scarcity of high-quality indigenous coals, and a cost curve that is shifting up and to the right
- In addition, China's intensifying focus on building new, modern mega-mills near the coast – and operating those mills at high capacity factors – should support the continued importation of high-quality seaborne material, in our view
- These price levels create the backdrop for anticipated ongoing coking coal imports – particularly when coupled with declining indigenous coal qualities

Underinvestment, along with increasing regulatory pressure, expected to continue to constrain Australian supply base

AUSTRALIAN METALLURGICAL COAL EXPORTS

(in millions of metric tons)



Source: Australian Bureau of Statistics, Internal

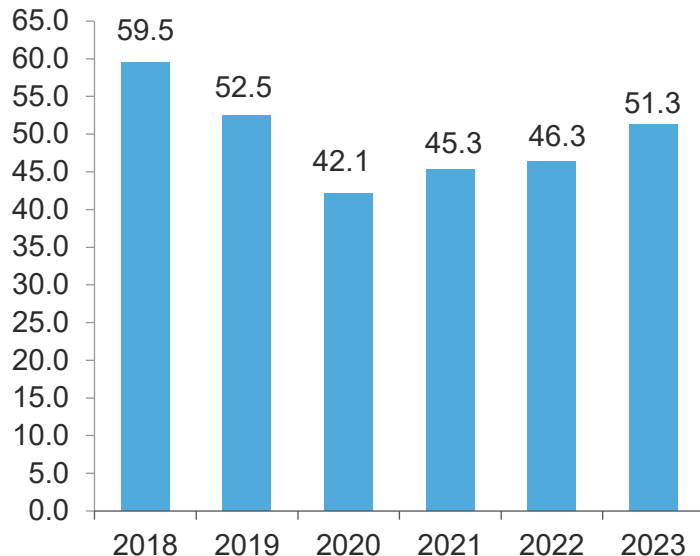
Australian export volumes have eroded in recent years

- Australian coking coal exports were down 20% in 2023 versus the peak year of 2016
- While heavy rainfall had a “dampening” effect on 2022 and 2023 production and exports, it doesn’t explain the longer-term trend
- The biggest source of downward pressure, in Arch’s view, is years of underinvestment in new coal supply
 - Most of the growth capex for the large, diversified miners is being directed to “transition minerals”
- Increasing regulatory and permitting pressures – along with typical depletion rates – are further constraining supply
 - The new royalty structure in Queensland is just the latest indication of an increasingly challenging operating environment
 - New South Wales also approved a new higher royalty rate regime
 - New climate change regulations have already scuttled some planned new investments

Coking coal output also remains muted in the U.S. and Canada, the No. 2 and No. 3 global producers of high-quality coking coal

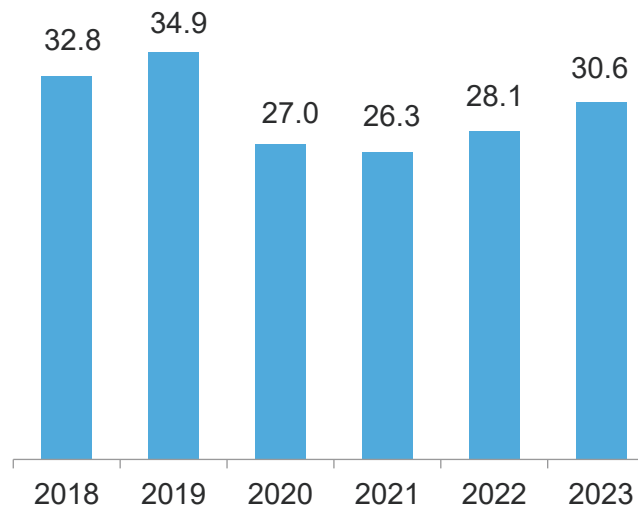
U.S. COKING COAL EXPORTS

(in millions of tons)



CANADIAN COKING COAL EXPORTS

(in millions of metric tons)



U.S. and Canadian coking coal exports continue to lag recent peak levels significantly

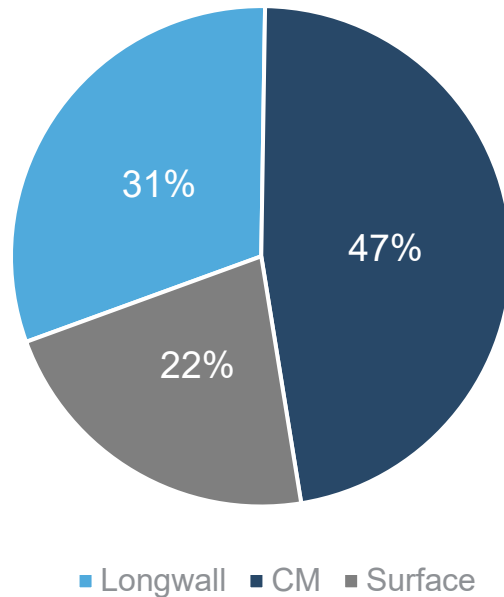
In the U.S., degradation and depletion of the reserve base, lack of capital availability, and intensifying regulatory pressures are acting to constrain new investment

Canada is largely a known quantity, with only two coking coal producers of size, as well as an increasingly challenging regulatory and permitting environment

Source: Customs Data, GTT, Internal

While there is new capacity coming online in the United States, we do not anticipate meaningful overall growth in supply

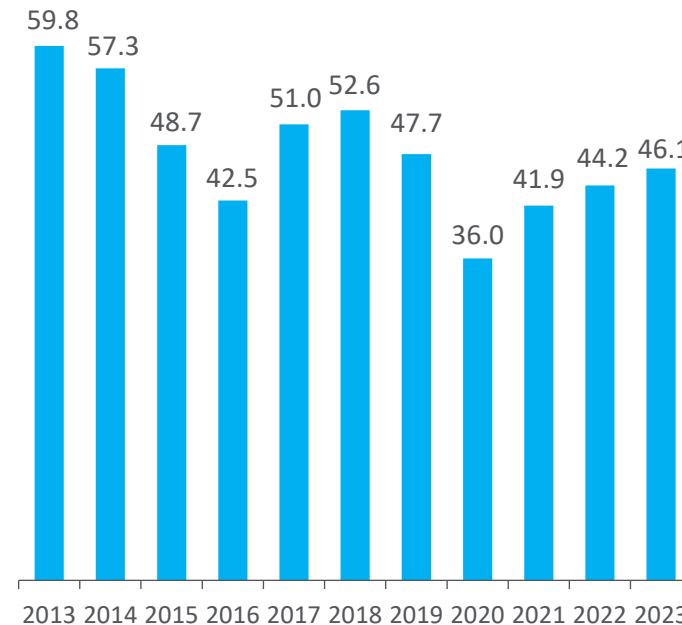
U.S. COKING COAL PRODUCTION, BY MINING METHOD



Source: MSHA, Internal
Note: U.S. coking coal production by mining method for 2023

COKING COAL PRODUCTION IN CENTRAL APPALACHIA

(in millions of tons)



PRESSURE ON U.S. SUPPLY OUTLOOK

Nearly 70% of U.S. coking coal supply consists of generally higher-cost continuous miner operations and regulation-constrained surface operations

The capital required for adding new production capacity has increased dramatically

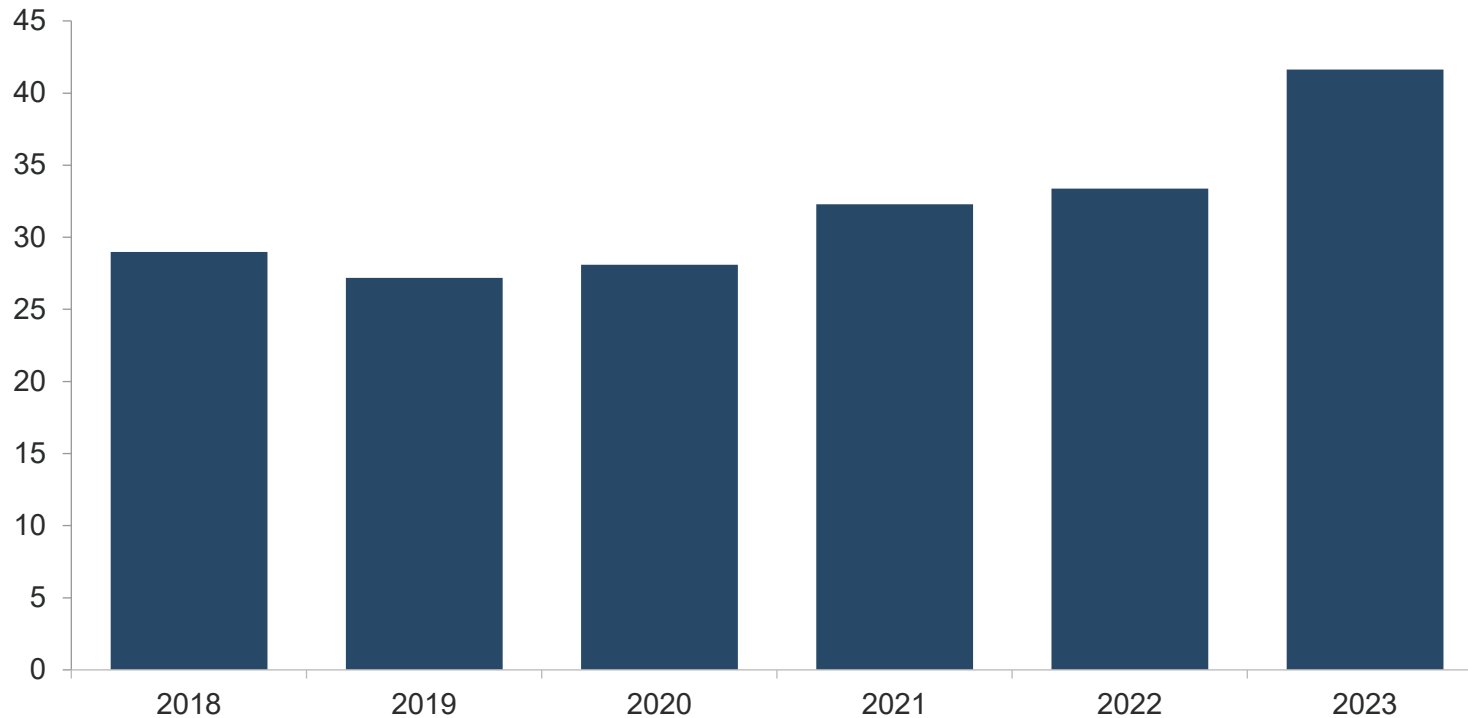
Investors in public companies continue to emphasize capital returns over expansion

We expect the modest new capacity coming online over the next several years to be counterbalanced by depletion, as underscored by the long-term trend in Central Appalachia

Russia remains the primary source of real growth in seaborne coking coal markets – albeit growth in lower-quality output

IMPORTS OF RUSSIAN COKING COAL

(partner country data, in millions of metric tons)



Source: Customs data, GTT, Internal

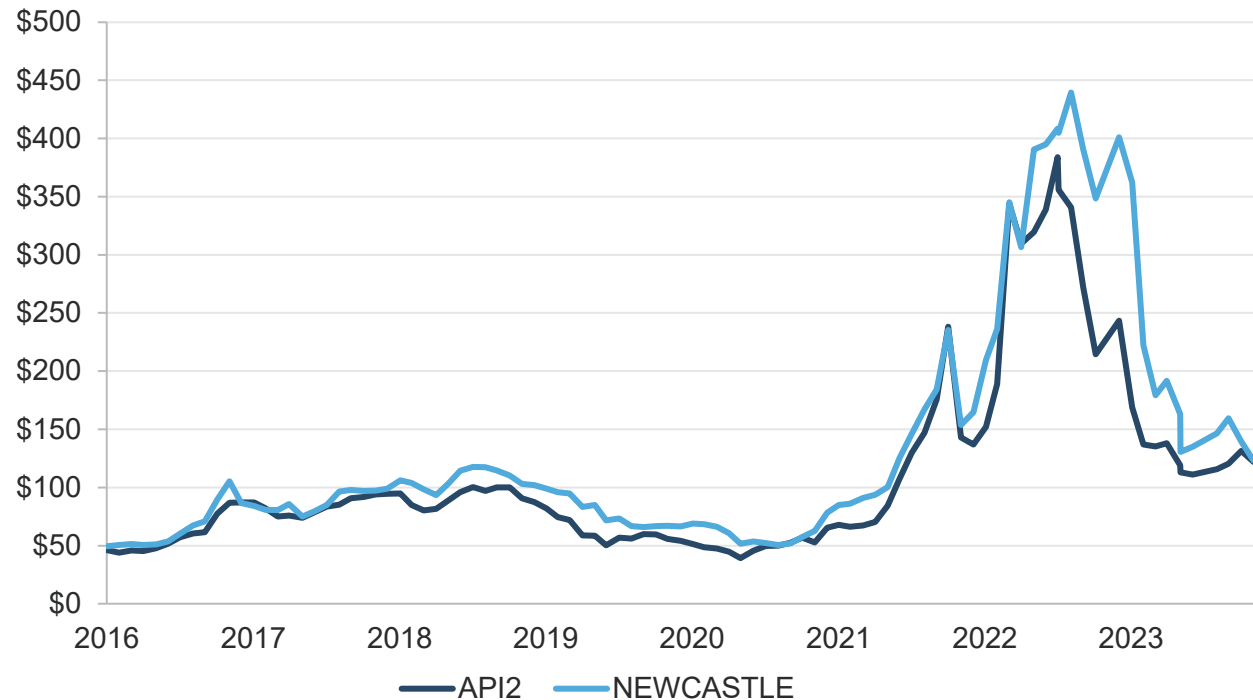
Even with the current hostilities, Russia has been able to maintain an upward trajectory in coking coal exports

- Russian exports of coking coal have increased around 38% in aggregate since 2018
- China has significantly increased its importation of Russian coking coals, which it can secure at a discount, but appears to be using Russian coals to supplement lower-quality indigenous production rather than to replace higher-quality seaborne coking coal volumes
- We believe Russian coking coal exports could still climb going forward, but that a step-change is unlikely – and even the current growth rate could be slowed by market pullbacks

We expect increased volatility in seaborne thermal markets going forward – again due to underinvestment in supply

NEWCASTLE AND API PRICE INDICES

(US\$ per metric ton)



Source: ICE, Bloomberg

International thermal prices experienced an unprecedented run-up – and multiple quarters of exceptional strength – in the second half of 2021 and throughout 2022

While prices have retraced significantly, we expect volatility to track well above historical averages going forward

We base this expectation on continuing underinvestment in thermal coal supply, echoing the trend in coking coal supply