



INDUSTRY UPDATE

METALS & MINING
Q4 2021



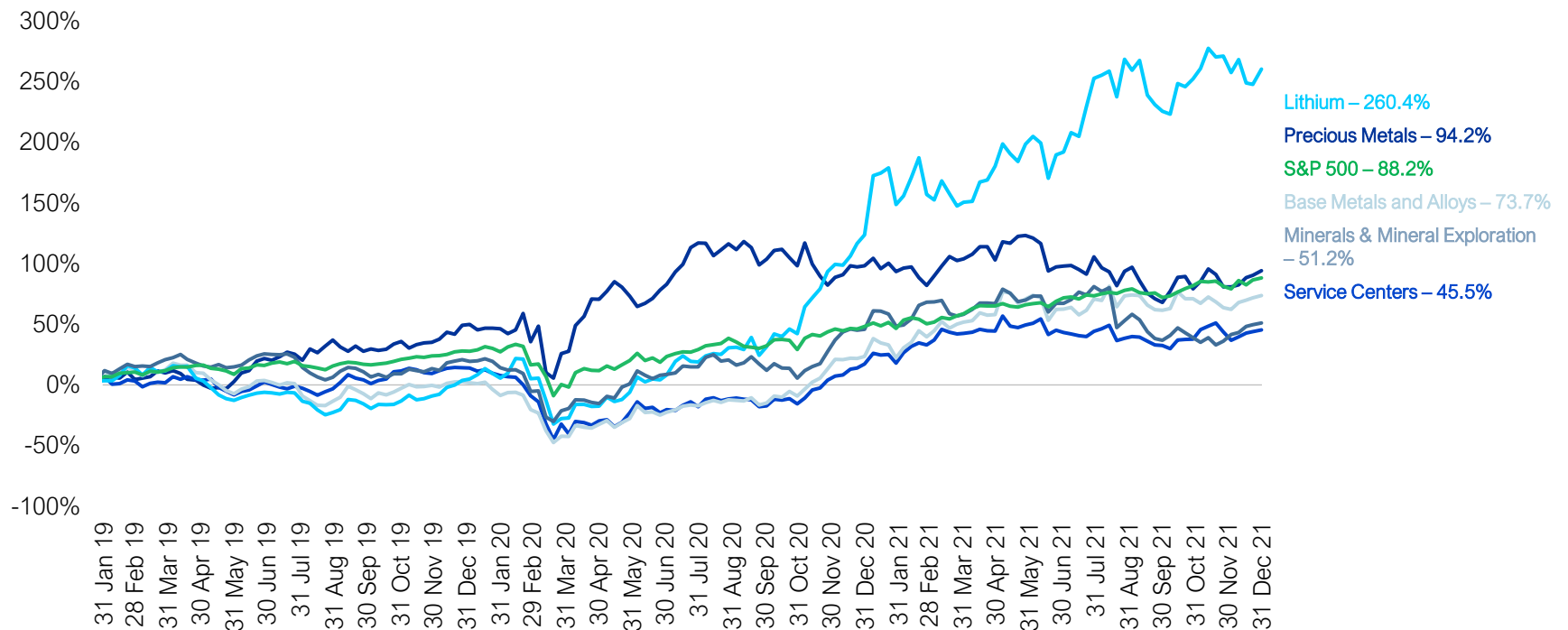
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Public Market Performance

Public equities across most segments of the Metals & Mining industry increased in Q4 2021 after a slight decrease in Q3. The Metals & Mining industry has continued to benefit from the economic rebound, but the market appears to be headed towards stabilization after several quarters of volatility. Historically, precious metals such as gold and silver have served as safe havens during times of recession or inflation, signaling that the market may begin to look away from these equities as the economy settles. Additionally, mining companies are expected to continue slow and steady growth while they grapple with increasing environmental regulations across the globe. The overall outlook of the industry is positive, and companies will continue to improve as they learn to navigate labor constraints and volatile demand. On a 3-year period ending in December 2021, the Lithium and Precious Metals sectors (260.4% and 94.2%, respectively) have outpaced the S&P 500, which has had an 88.2% return.

Metals & Mining Market Performance

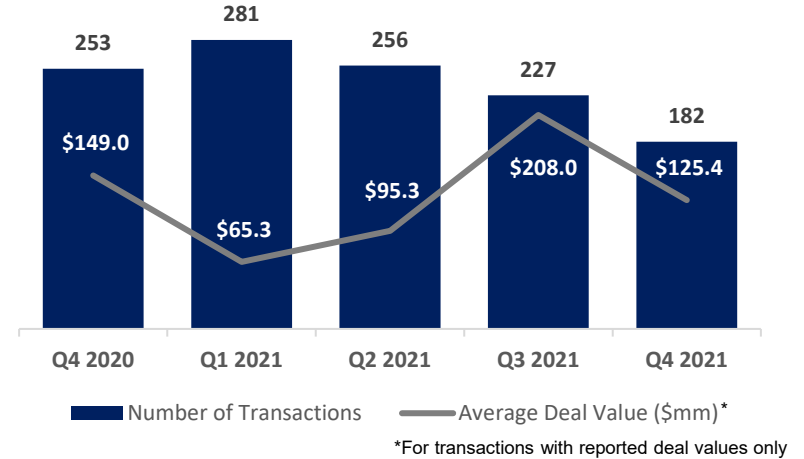


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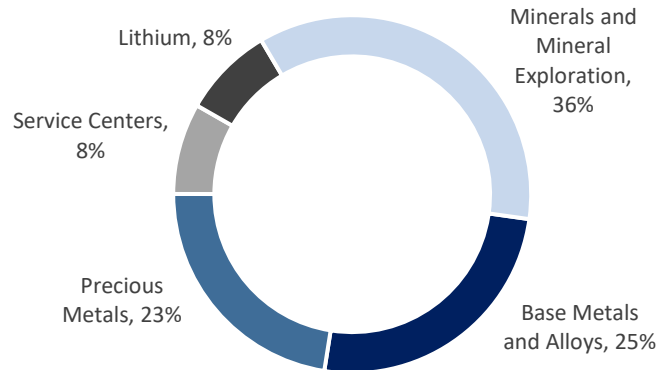
M&A Activity

The volume of M&A activity in the Metals & Mining industry has continued its downward trend, with 182 deals closed in Q4 2021, compared to 227 during the prior quarter. The average deal value (based on transactions with reported values only) also decreased by approximately 40% after two consecutive quarters of substantial increase. This may indicate that the market is changing its approach from targeting higher-end companies to more mid-range metals & mining companies. Strategic buyers continue to represent the majority of the transactions in the sector as they seek continued growth through acquisition. Private equity sponsors maintain their activity in the sector, although participation in closed transactions decreased slightly this quarter from the previous. The Minerals and Mineral Exploration category led activity, accounting for 36% of total Metals & Mining transaction volume. The Base Metals and Alloys sector proved to be an attractive target as well with 25% of deal flow.

Metals & Mining M&A Activity

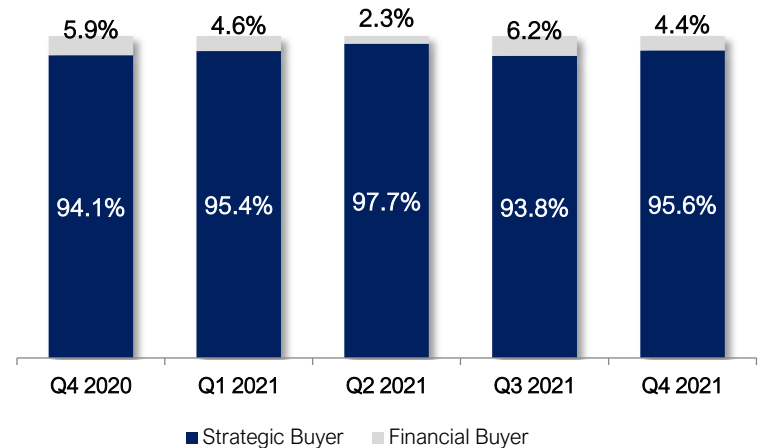


Q4 2021 M&A Activity by Sector



Source: S&P Capital IQ
 Note: All values based on publicly available data as of 12/31/2021

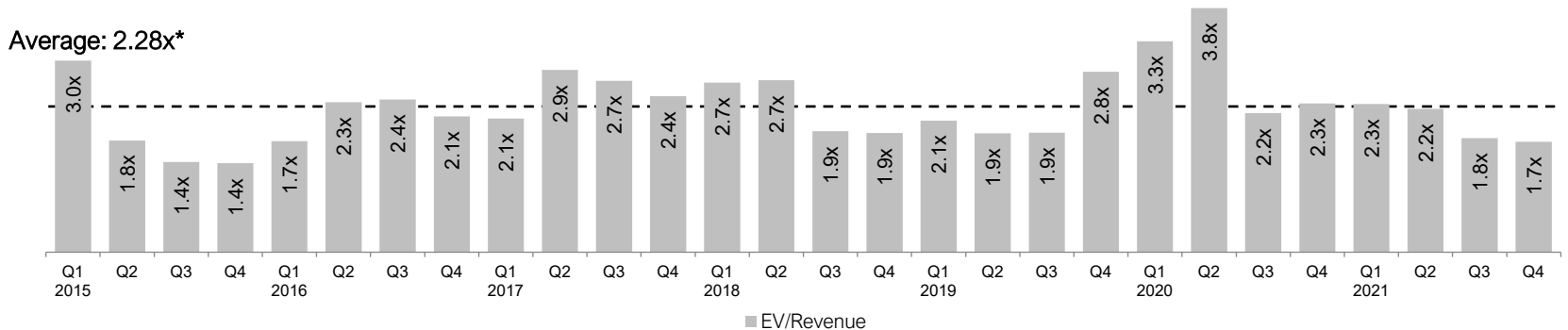
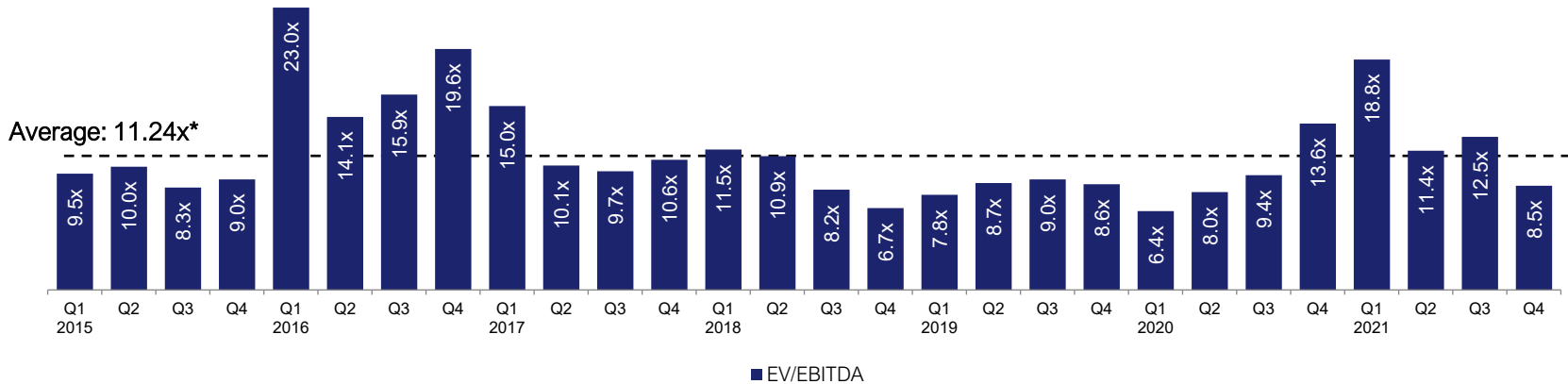
M&A Activity by Buyer Type



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Public Company Trading Multiples

Select publicly traded companies representing the key sectors across the Metals & Mining industry traded at an average multiple of 11.24x EBITDA and 2.28x Revenue. Trading multiples varied significantly across and within the five categories with the strongest multiples observed in the Precious Metals sector. Both global and domestic precious metals producers and explorers had strong quarters with companies such as Anglo American Platinum, Eldorado, and Newmont realizing gains of 30.9%, 20.9% and 14.2% in their share price, respectively, as companies continue to reestablish their mining operations after several stoppages during COVID-19.



Source: S&P Capital IQ

Note: All values based on publicly available data as of 12/31/2021

*Limited sample size does not support a meaningful conclusion



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Select M&A Transaction Activity

Announcement Date	Target Name	Buyer Name	Sector	Value (\$mm)	TEV/Rev	TEV/EBITDA
12/31/2021	Ohio Valley Aluminum Company, LLC	Matalco Inc.	Base Metals & Alloys	-	-	-
12/23/2021	Manex Resource Group Inc.	Malaspina Consultants Inc.	Precious Metals	-	-	-
12/20/2021	Rotax Metals Inc.	Yarde Metals Inc.	Service Center	-	-	-
12/20/2021	Sasco Tubes and Roll Forming Inc.	Atkore Inc.	Base Metals & Alloys	15.8	-	-
12/16/2021	Can-America Minerals Inc.	Green Light Metals Inc.	Minerals & Mineral Exploration	-	-	-
12/13/2021	Blackwater Gold STREAM	Wheaton Precious Metals Corp.	Precious Metals	300.0	-	-
12/13/2021	California Steel Industries Inc.	Nucor Corporation	Base Metals & Alloys	-	-	-
12/10/2021	Precision Tool & Die, Inc.	CORE Industrial Partners, LLC	Base Metals & Alloys	-	-	-
12/6/2021	Homestake Resource Corp.	Dolly Varden Silver Corporation	Precious Metals	50.0	-	-
12/2/2021	Universal Refractories, Inc.	Vesuvius plc	Base Metals & Alloys	57.1	1.41x	6.64x
12/2/2021	Taiga Gold Corp.	SSR Mining Inc.	Precious Metals	22.2	-	-
11/29/2021	SolidusGold Inc.	Valhalla Metals Inc.	Precious Metals	-	-	-
11/4/2021	Boyd Metals, Inc.	Russel Metals Inc.	Service Center	110.0	-	-
11/1/2021	Golden Star Resources Ltd.	Chijin International (HK) Limited	Precious Metals	697.6	2.15x	5.44x
11/1/2021	Millennial Lithium Corp.	Lithium Americas Corp.	Lithium	433.1	-	-
10/21/2021	Sphinx Resources Ltd.	Barlow Mine Inc.	Minerals & Mineral Exploration	-	-	-
10/13/2021	Geneva Structural Tubes, LLC	MKK USA Inc.	Base Metals & Alloys	24.0	1.08x	-
10/11/2021	Ferrous Processing & Trading Company	Cleveland-Cliffs Inc.	Base Metals & Alloys	775.0	-	7.75x

Source: S&P Capital IQ

Note: All values based on publicly available data as of 12/31/2021



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Public Comparable Companies

<u>Company Name</u>	<u>Enterprise</u>	<u>Revenue</u>	<u>Price Change</u>		<u>LTM Margins</u>		<u>TEV / LTM:</u>		
	<u>Value (\$mils)</u>	<u>(\$mils)</u>	<u>3 month</u>	<u>12 month</u>	<u>Gross</u>	<u>EBITDA</u>	<u>Revenue</u>	<u>EBITDA</u>	
Precious Metals									
Anglo American Platinum Limited	\$ 26,219	\$ 14,234	30.9%	15.6%	43.4%	44.9%	2.1x	4.5x	
Golden Minerals Company	\$ 49	\$ 17	(19.1%)	(54.0%)	42.9%	(19.6%)	2.8x	NM	
Agnico Eagle Mines Limited	\$ 14,431	\$ 3,803	2.5%	(24.6%)	56.8%	48.5%	3.8x	7.8x	
Wheaton Precious Metals Corp.	\$ 18,957	\$ 1,210	13.7%	2.8%	76.5%	72.1%	15.7x	21.8x	
Eldorado Gold Corporation	\$ 1,807	\$ 975	20.9%	(29.2%)	52.1%	44.8%	1.9x	4.1x	
Pan American Silver Corp.	\$ 4,999	\$ 1,641	6.9%	(27.6%)	42.9%	38.2%	3.0x	7.6x	
Fresnillo plc	\$ 9,100	\$ 2,843	14.6%	(21.6%)	40.9%	54.0%	3.3x	6.0x	
Eurasia Mining Plc	\$ 937	\$ 2	(1.7%)	(28.0%)	(13.9%)	(177.9%)	NM	NM	
Newmont Corporation	\$ 51,331	\$ 12,213	14.2%	3.6%	53.5%	49.5%	4.2x	7.8x	
Barrick Gold Corporation	\$ 42,390	\$ 11,954	5.1%	(16.5%)	41.4%	53.2%	3.5x	6.3x	
Coeur Mining, Inc.	\$ 1,684	\$ 853	(18.3%)	(51.3%)	39.0%	31.2%	2.0x	5.8x	
Mean	\$ 15,628	\$ 4,522	6.3%	(21.0%)	43.2%	21.7%	4.2x	8.0x	
Median	\$ 9,100	\$ 1,641	6.9%	(24.6%)	42.9%	44.9%	3.2x	6.3x	

Source: S&P Capital IQ

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Public Comparable Companies (Cont'd)

<u>Company Name</u>	<u>Enterprise</u>	<u>Revenue</u>	<u>Price Change</u>		<u>LTM Margins</u>		<u>TEV / LTM:</u>		
	<u>Value (\$mils)</u>	<u>(\$mils)</u>	<u>3 month</u>	<u>12 month</u>	<u>Gross</u>	<u>EBITDA</u>	<u>Revenue</u>	<u>EBITDA</u>	
Service Centers									
Russel Metals Inc.	\$ 1,727	\$ 2,952	10.6%	49.0%	27.8%	13.8%	0.6x	4.1x	
DXP Enterprises, Inc.	\$ 791	\$ 1,053	(13.2%)	15.5%	27.3%	4.3%	0.8x	11.7x	
Reliance Steel & Aluminum Co.	\$ 11,380	\$ 12,239	13.9%	35.5%	32.3%	14.5%	0.9x	6.1x	
Ryerson Holding Corporation	\$ 1,874	\$ 4,994	17.0%	91.0%	19.5%	7.0%	0.4x	4.9x	
Schnitzer Steel Industries, Inc.	\$ 1,630	\$ 3,065	18.5%	62.7%	15.9%	9.7%	0.6x	5.6x	
Worthington Industries, Inc.	\$ 3,476	\$ 4,081	3.7%	6.5%	19.5%	12.3%	0.9x	5.0x	
thyssenkrupp AG	\$ 3,315	\$ 39,424	3.5%	10.8%	12.8%	3.2%	0.1x	2.6x	
Klöckner & Co SE	\$ 1,623	\$ 7,702	(2.9%)	24.5%	26.0%	10.8%	0.2x	1.9x	
Toyota Tsusho Corporation	\$ 26,803	\$ 66,347	8.0%	14.1%	9.6%	5.3%	0.4x	7.4x	
Olympic Steel, Inc.	\$ 573	\$ 2,019	(3.5%)	76.3%	22.5%	7.5%	0.3x	3.5x	
Mean	\$ 5,319	\$ 14,388	5.6%	38.6%	21.3%	8.8%	0.5x	5.3x	
Median	\$ 1,800	\$ 4,538	5.9%	30.0%	21.0%	8.6%	0.5x	4.9x	

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Public Comparable Companies (Cont'd)

<u>Company Name</u>	<u>Enterprise</u>	<u>Revenue</u>	<u>Price Change</u>		<u>LTM Margins</u>		<u>TEV / LTM:</u>		
	<u>Value (\$mils)</u>	<u>(\$mils)</u>	<u>3 month</u>	<u>12 month</u>	<u>Gross</u>	<u>EBITDA</u>	<u>Revenue</u>	<u>EBITDA</u>	
Base Metals and Alloys									
United States Steel Corporation	\$ 9,023	\$ 20,275	8.4%	42.0%	28.3%	26.4%	0.5x	2.3x	
Nucor Corporation	\$ 35,415	\$ 36,484	15.9%	114.6%	30.2%	27.9%	1.1x	4.6x	
Commercial Metals Company	\$ 5,105	\$ 7,320	19.1%	76.7%	17.5%	12.9%	0.8x	6.2x	
Allegheny Technologies Incorporated	\$ 3,452	\$ 2,800	(4.2%)	(5.0%)	11.9%	7.9%	1.3x	15.3x	
Carpenter Technology Corporation	\$ 1,930	\$ 1,557	(10.8%)	0.2%	5.5%	0.7%	1.3x	68.5x	
Haynes International, Inc.	\$ 462	\$ 365	8.3%	69.2%	15.5%	7.5%	1.4x	36.5x	
Materion Corporation	\$ 2,010	\$ 1,453	33.9%	44.3%	18.7%	9.2%	1.4x	13.9x	
Hyundai Steel Company	\$ 13,780	\$ 17,928	(14.1%)	(5.4%)	13.1%	15.8%	0.8x	4.9x	
Voestalpine AG	\$ 10,900	\$ 16,139	(2.0%)	1.5%	21.2%	13.3%	0.7x	6.2x	
Glencore plc	\$ 95,706	\$ 165,182	6.9%	59.6%	4.0%	8.4%	0.6x	6.1x	
HBIS Group Co., Ltd.	\$ -	\$ 66,893	-	-	14.9%	8.1%	0.0x	0.0x	
POSCO	\$ 25,321	\$ 64,082	(17.5%)	(7.8%)	15.6%	16.8%	0.4x	2.5x	
Ternium S.A.	\$ 10,161	\$ 14,341	2.9%	49.7%	36.6%	35.7%	0.7x	1.8x	
Southern Copper Corporation	\$ 52,027	\$ 10,934	9.9%	(5.2%)	64.4%	62.8%	5.0x	7.9x	
Steel Dynamics, Inc.	\$ 14,311	\$ 18,409	6.1%	68.3%	29.1%	25.3%	0.9x	4.1x	
Mueller Industries, Inc.	\$ 3,465	\$ 3,769	44.4%	69.1%	22.0%	17.2%	1.0x	6.1x	
Cleveland-Cliffs Inc.	\$ 16,489	\$ 17,354	9.9%	49.5%	21.5%	24.4%	1.0x	3.9x	
Universal Stainless & Alloy Products, Inc.	\$ 123	\$ 156	(21.9%)	6.1%	5.1%	4.4%	0.9x	12.4x	
Alcoa Corporation	\$ 13,115	\$ 12,152	21.7%	158.5%	24.7%	22.6%	1.2x	5.6x	
Synalloy Corporation	\$ 248	\$ 295	49.5%	110.6%	15.9%	9.7%	0.8x	7.6x	
Mean	\$ 15,652	\$ 23,894	8.8%	47.2%	20.8%	17.8%	1.1x	10.8x	
Median	\$ 9,592	\$ 13,246	8.3%	49.5%	18.1%	14.6%	0.9x	6.1x	

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Public Comparable Companies (Cont'd)

<u>Company Name</u>	<u>Enterprise</u>	<u>Revenue</u>	<u>Price Change</u>		<u>LTM Margins</u>		<u>TEV / LTM:</u>		
	<u>Value (\$mils)</u>	<u>(\$mils)</u>	<u>3 month</u>	<u>12 month</u>	<u>Gross</u>	<u>EBITDA</u>	<u>Revenue</u>	<u>EBITDA</u>	
Lithium									
Albemarle Corporation	\$ 29,144	\$ 3,313	6.8%	58.5%	31.0%	24.4%	8.8x	29.9x	
Sociedad Química y Minera de Chile S.A.	\$ 14,522	\$ 2,292	(6.1%)	2.7%	29.7%	33.1%	6.3x	18.7x	
Ganfeng Lithium Co., Ltd.	\$ 30,812	\$ 1,348	(11.1%)	45.1%	34.0%	29.2%	22.5x	77.1x	
Tianqi Lithium Corporation	\$ 28,673	\$ 727	6.9%	180.0%	49.4%	44.8%	38.9x	86.7x	
Pilbara Minerals Limited	\$ 6,975	\$ 132	56.7%	246.7%	11.4%	1.9%	54.6x	NM	
Livent Corporation	\$ 3,990	\$ 380	5.5%	29.4%	17.6%	10.1%	10.5x	106.7x	
Allkem Limited	\$ 4,959	\$ 85	20.1%	119.3%	55.8%	25.5%	60.3x	232.8x	
Savannah Resources Plc	\$ 86	\$ -	10.4%	(1.9%)	-	NA	0.0x	NM	
Piedmont Lithium Inc.	\$ 768	\$ -	1.1%	89.8%	-	NA	0.0x	NM	
Lithium Americas Corp.	\$ 3,197	\$ -	30.0%	132.0%	-	NA	0.0x	NM	
Mineral Resources Limited	\$ 7,495	\$ 2,586	25.5%	40.9%	88.8%	33.9%	2.8x	5.5x	
Mean	\$ 11,875	\$ 987	13.2%	85.7%	28.9%	25.4%	-*	-*	
Median	\$ 6,975	\$ 380	6.9%	58.5%	29.7%	27.3%	-*	-*	

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Public Comparable Companies (Cont'd)

<u>Company Name</u>	<u>Enterprise</u>	<u>Revenue</u>	<u>Price Change</u>		<u>LTM Margins</u>		<u>TEV / LTM:</u>		
	<u>Value (\$mils)</u>	<u>(\$mils)</u>	<u>3 month</u>	<u>12 month</u>	<u>Gross</u>	<u>EBITDA</u>	<u>Revenue</u>	<u>EBITDA</u>	
Minerals and Mineral Exploration									
CONSOL Energy Inc.	\$ 1,327	\$ 1,311	(12.7%)	215.0%	35.4%	24.6%	1.1x	8.2x	
Arch Resources, Inc.	\$ 1,767	\$ 1,732	(1.5%)	108.6%	19.2%	12.8%	1.0x	7.6x	
Peabody Energy Corporation	\$ 2,153	\$ 3,318	(31.9%)	317.8%	23.1%	20.3%	0.8x	9.8x	
Alliance Resource Partners, L.P.	\$ 1,972	\$ 1,570	16.3%	182.1%	35.1%	30.6%	1.3x	4.2x	
Warrior Met Coal, Inc.	\$ 1,443	\$ 856	10.5%	20.6%	27.0%	21.0%	1.7x	8.0x	
Beijing Haohua Energy Resource Co., Ltd.	\$ 2,666	\$ 1,062	(31.4%)	61.5%	57.3%	45.5%	2.5x	5.5x	
Whitehaven Coal Limited	\$ 2,549	\$ 1,172	(18.9%)	49.5%	37.1%	35.1%	2.2x	5.3x	
Hallador Energy Company	\$ 187	\$ 244	(16.9%)	67.3%	18.6%	14.8%	0.8x	5.2x	
BHP Group Limited	\$ 162,225	\$ 61,231	10.8%	(7.8%)	88.2%	58.8%	2.7x	4.7x	
Mean	\$ 19,588	\$ 8,055	(8.4%)	112.7%	37.9%	29.3%	1.6x	6.5x	
Median	\$ 1,972	\$ 1,311	(12.7%)	67.3%	35.1%	24.6%	1.3x	5.5x	
Metals & Mining Mean	\$ 13,853	\$ 12,451	6.0%	50.1%	28.9%	19.9%	1.7x	8.3x	
Metals & Mining Median	\$ 3,476	\$ 2,800	6.9%	41.5%	26.0%	18.7%	1.0x	5.9x	

Source: S&P Capital IQ

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Metals & Mining Expertise

GCG's Metals & Mining team has vast industry background and expertise formed by working with clients across nearly all aspects of the sector. Our professionals bring direct experience in senior operating roles within the industry to augment our investment banking and consulting services. With experience serving private and publicly traded Metals & Mining companies, GCG has a deep understanding of the trends and dynamics affecting this increasingly global industry.

More about Greenwich Capital Group

Greenwich Capital Group ("GCG") is a middle market focused advisory firm offering a range of investment banking and consulting services to private companies, public companies and private equity investors. For additional perspective or to discuss M&A related opportunities in the metals & mining sector, please reach out to GCG's metals & mining practice leader, Chris Lewis. For more information, please visit www.greenwichgp.com.



Chris Lewis

Managing Director

Metals & Mining Leader
clewis@greenwichgp.com

M: (615) 946-3462

Data Sources: We have based our findings on data provided by industry recognized sources. Data and information for this publication was collated from the S&P Capital IQ database. For more information on this or anything else related to our research, please email info@greenwichgp.com.

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