

North American Metals & Mining

Q4'23 preview: it's really all about guidance. AA, FCX and steels to kick-off.

Price Objective Change

Steady demand vs. constrained supply

The North American Metals and Mining sector will report Q4'23 results from next week through mid-March, while Commercial Metals (CMC) will report fiscal Q1'24 results today. Backward looking Q4 results are normally overshadowed by forward-year and long-term guidance, and reserve and resource updates in the mining sector. We expect key themes will be: surprisingly steady demand, constrained supply, M&A (all sectors), the sustainability of capital returns, and politics (elections, taxes, regulations).

Overall metals & mining themes for Q4'23 results

Steady demand: Across the metals, we've been surprised by the resilience of demand; we expect management comments to project continued strength.

Constrained supply: Through either rational competitive behavior or in some cases, ill-fortune, we expect metal production outlook could continue surprising down, as the companies in our coverage report update volume guidance (and the year progresses).

M&A: Whether precious metals, base metals, or steel, M&A activity and/or discussion is rampant in the sector. We expect this to be a focus on many of the calls.

Sustainability of capital returns: Following above normal cash generation in 2023 (+2021-22), managements may increasingly balance capital returns with higher capex.

Politics: While politics has played an outsized roll in the metals & mining sector in recent years, we think 2024 could see this trend accelerate. Important countries to metals and mining with major elections in 2024 include: Dominican Republic, Ghana, Indonesia, Namibia, Panama, South Africa, and the US. Conflicts should also factor.

Sub-sector focus areas for Q4'23 results season

Gold: Strong gold prices the impacts on capital allocation priorities, low valuations (buy-backs?); M&A and or/advanced project pipelines to deliver on production growth.

Base metals: M&A, modest volume guidance, copper prices, politics, capital allocation.

Rare Earths: Ramp-up of MP's Stage II separation circuits, Neodymium-Praseodymium (NdPr) price outlook vs marginal cost support and Stage III/heavy rare earth project updates.

Steel: Capital allocation (buybacks/dividends vs capex/growth), sustainability of hot rolled coil (HRC) vs supply discipline, (infrastructure) demand trends, increased competitiveness in auto/electrical post US Steel - Nippon Steel Company, and stabilization/recovery in downstream order backlogs.

Uranium: Focus should be on strong spot pricing and the supply response outlook.

We update our PO's for Freeport-McMoran, MP Materials and New Gold. See page 3 for

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Exhibit 1: Reporting Calendar

For the NA Metals and Mining Sector

Ticker	Report Date	Q4'23 BofAe	Q4'23 Cons
CMC	8-Jan	1.69	1.46
AA	17-Jan	(1.13)	(0.84)
STLD	23-Jan	2.63	2.56
FCX	24-Jan	0.20	0.29
NUE	29-Jan	2.83	2.92
CLF	29-Jan	(0.04)	0.05
RS	15-Feb	4.01	3.87
AEM	15-Feb	0.50	0.43
PAAS	21-Feb	0.07	0.12
TECK	21-Feb	1.32	1.34
FNV	5-Mar	0.78	0.84
RGLD	TBA	0.92	0.81
NEM	TBA	0.29	0.50
SSRM	TBA	0.41	0.32
WPM	TBA	0.32	0.30
X	TBA	0.26	0.27
YCG	TBA	0.29	0.26
YCCO	TBA	0.13	0.25
GOLD	TBA	0.30	0.26
EGO	TBA	0.15	0.15
YHBM	TBA	0.15	0.17
AGI	TBA	0.11	0.11
KGC	TBA	0.14	0.09
YTFPM	TBA	0.09	0.08
BTG	TBA	0.09	0.08
NGD	TBA	0.03	0.02
IAG	TBA	0.00	0.00
MP	TBA	(0.02)	(0.03)
NEXA	TBA	0.04	(0.07)

Source: Company Reports, Bloomberg, BofA Global Research. CMC is Q1'24.

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details.



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PO changes

Freeport McMoRan (FCX): We increase our target 2024E and 2025E EV/EBITDA multiples to 9.5x and 9.0x from 9.0x and 8.5x in order to reflect FCX's improved relative attractiveness after some copper peers experienced material operating challenges. We thus increase our PO to \$44 per share from \$40 per share. We maintain our Neutral rating as we see the share already quite accurately reflecting its relative growth, profitability and capital returns vs. peers.

MP Materials (MP): We reduce our 2024E EBITDA by 11% to \$326m (assuming slower ramp-up of Stage II Neodymium-Praseodymium (NdPr) oxide separation) and lower our PO from \$33 per share to \$30 per share based on 15x (unchanged) 2024E EV/EBITDA. We remain constructive on the medium to long term outlook for demand and pricing for NdPr (MP's primary product) and maintain our Buy rating on MP.

New Gold (NGD): We are increasing our price objective (PO) to \$1.30/C\$1.80 (from \$1.25/C\$1.70). We are raising our NAV multiple to 0.6x (from 0.5x) to reflect operational improvements expected at New Afton as the C-Zone ramps up. The higher multiple also reflects rising multiples given recent bullish sentiment for the gold price. We maintain our Underperform as we believe expectations of project execution remain elevated vs. our expected view and we see risks to the company's base case plan.

Where we are differentiated

Barrick Gold (GOLD): We forecast Q4'23 gold production of 1.07 million ounces (Moz) vs. Bloomberg consensus at 1.23Moz, as we think the impact of leach tank motor upgrades and a hurricane were likely more severe than the consensus view. We are also 4% below consensus on Q4'23 EBITDA (see exhibit 8). For 2024, our gold production forecast of 4.19Moz, is 6%/5% Bloomberg/Visible Alpha (VA) consensus (see exhibit 10).

Cleveland-Cliffs (CLF): We forecast Q4'23 EBITDA of \$278mn, 12% below Bloomberg consensus at \$315mn. We think costs are being to aggressively estimated by consensus and expectations for pricing might not fully account for lags.

Pan American Silver (PAAS): We forecast 2024E gold production of 971 thousand ounces (koz), 4%/9% below Bloomberg/VA consensus. We forecast 2024E silver production of 21Moz, 26%/21% below Bloomberg/VA consensus (see exhibit 10).

Teck Resources (TECK): For 2024 copper production, we forecast 492 thousand tonnes (kt), 9% below VA consensus at 542kt. We think the difference lies in the forecast for QB2 copper production in 2024: we forecast 205kt while the sell-side consensus is in the range of 260-280kt.

Estimate changes

We are marking-to-market Q4'23 commodity prices with our preview, which is driving estimate changes for most of our companies. We also tweak operational assumptions for many ahead of results, particularly ahead of 2024 guidance, including some that carry-over to future years.

Exhibit 2: 2023E-2025E EBITDA Changes for North American Metals & Mining Coverage Universe

Q4'23 commodity price mark-to-market updates and tweaking 2024 estimates ahead of guidance releases are driving estimate changes.

						EBITDA (US\$m)					
	BofA Symbol	1/5/2024 Close	2023E	Previous 2024E	2025E	2023E	Revised 2024E	2025E	2023E	% Change 2024E	2025E
Senior Gold Producers											
Agnico Eagle Mines	AEM	\$52.63	4,745	3,548	4,127	4,785	3,435	4,115	0.8%	-3.2%	-0.3%
Barrick Gold	GOLD	\$17.49	5,032	6,690	7,991	5,147	6,405	7,991	2.3%	-4.3%	0.0%
Kinross Gold	KGC	\$5.71	1,798	1,782	2,211	1,841	1,783	2,211	2.4%	0.1%	0.0%
Newmont Corporation	NEM	\$40.34	3,609	5,972	9,971	3,343	5,810	8,184	-7.4%	-2.7%	-17.9%
Mid-Tier Gold Producers											
B2Gold	BTG	\$3.04	1,073	912	786	1,092	1,056	727	1.8%	15.8%	-7.5%
Centerra Gold	YCG	C\$7.64	229	297	317	240	319	317	4.5%	7.4%	0.0%
IAMGOLD	IAG	\$2.36	288	277	715	298	277	715	3.3%	0.0%	0.0%
SSR Mining	SSRM	\$10.54	485	367	447	501	367	447	3.3%	0.0%	0.0%
Intermediate/Junior Gold Producers											
Alamos Gold	AGI	\$12.99	507	587	630	510	559	618	0.4%	-4.8%	-1.9%
New Gold	NGD	\$1.44	306	451	697	313	361	563	2.4%	-19.8%	-19.3%
Primary Silver Producers											
Pan American Silver	PAAS	\$15.48	582	845	1,097	605	842	1,097	4.0%	-0.4%	0.0%
Royalty/Streaming Companies											
Franco-Nevada	FNV	\$110.04	1,031	1,071	1,389	1,037	1,055	1,367	0.6%	-1.5%	-1.6%
Royal Gold	RGLD	\$118.38	462	574	566	467	574	625	1.1%	0.0%	10.5%
Triple Flag	TFPM	\$13.05	156	217	237	158	217	237	1.1%	0.0%	0.0%
Wheaton Precious Metals	WPM	\$47.62	705	975	1,103	715	975	1,103	1.4%	0.0%	0.0%
Aluminum producer											
Alcoa	AA	\$32.13	557	1,481	2,408	557	1,482	2,408	0.0%	0.1%	0.0%
Copper producer											
Freeport-McMoRan	FCX	\$41.41	7,935	7,922	10,778	8,663	7,922	10,778	9.2%	0.0%	0.0%
Hudbay Minerals	HBM	\$5.35	611	900	1,044	625	900	1,044	2.2%	0.0%	0.0%
Diversified producers											
Teck Resources	TECK	C\$40.38	6,509	6,243	5,342	6,405	5,976	5,342	-1.6%	-4.3%	0.0%
Rare earths producers											
MP Materials	MP	C\$18.34	88	368	455	98	326	455	11.7%	-11.3%	0.0%
Uranium producers											
Cameco	YCCO	\$56.48	728	2,415	2,954	728	2,415	2,954	0.0%	0.0%	0.0%
Zinc producers											
NEXA	NEXA	\$6.92	311	487	485	313	487	485	0.5%	0.0%	0.0%
Steel producers											
Cleveland Cliffs	CLF	\$19.17	1,909	2,918	2,670	1,910	2,916	2,670	0.0%	-0.1%	0.0%
Commercial Metals Co.	CMC	\$48.22	1,460	1,231	1,099	1,460	1,231	1,099	0.0%	0.0%	0.0%
Steel Dynamics	STLD	\$116.22	3,683	3,387	2,627	3,674	3,388	2,627	-0.2%	0.0%	0.0%
Nucor Corp.	NUE	\$170.57	7,374	6,836	5,787	7,316	6,836	5,787	-0.8%	0.0%	0.0%
United States Steel Corp.	X	\$48.35	2,097	2,429	1,984	2,066	2,423	1,986	-1.5%	-0.2%	0.1%
Reliance Steel & Aluminum Co.	RS	\$277.64	1,974	1,867	1,808	1,975	1,867	1,808	0.1%	0.0%	0.0%

Source: BofA Global Research Estimates, Bloomberg

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EPS changes

Below we summarize changes to our 2023-2025E EPS.

Exhibit 3: 2023E-2025E EPS Changes for North American Metals & Mining Coverage Universe

Q4'23 commodity price market to market updates are driving most of the changes

			EPS (US\$/sh)			% Change			CFPS (US\$/sh)			% Change		
	BofA Symbol	1/5/2024 Close	2023E	Revised 2024E	2025E	2023E	2024E	2025E	2023E	Revised 2024E	2025E	2023E	2024E	2025E
Senior Gold Producers														
Agnico Eagle Mines	AEM	\$52.63	2.17	2.34	3.21	2.4%	-6.0%	-0.6%	5.42	5.72	6.70	1.0%	-2.7%	-0.2%
Barrick Gold	GOLD	\$17.49	0.87	1.18	1.55	4.8%	-4.8%	0.0%	2.42	2.47	3.05	2.2%	-2.5%	0.0%
Kinross Gold	KGC	\$5.71	0.46	0.45	0.72	4.5%	-2.2%	-2.7%	1.22	1.21	1.48	2.1%	-0.6%	-2.1%
Newmont Corporation	NEM	\$40.34	1.37	1.88	3.26	-9.3%	-14.5%	-20.1%	3.28	4.09	5.47	-5.9%	-10.0%	-17.4%
Mid-Tier Gold Producers														
B2Gold	BTG	\$3.04	0.28	0.34	0.22	3.7%	17.2%	-12.0%	0.64	0.59	0.43	1.6%	15.7%	-6.5%
Centerra Gold	YCG	C\$7.64	0.06	0.35	0.44	nm	-10.3%	-10.2%	0.65	1.01	1.03	8.7%	-3.4%	-4.3%
Eldorado Gold	EGO	\$11.96	0.52	0.36	0.17	6.1%	0.0%	0.0%	1.65	1.69	1.75	2.3%	0.0%	0.0%
IAMGOLD	IAG	\$2.36	0.04	0.00	0.07	33.3%	nm	0.0%	0.68	0.45	1.09	1.9%	0.0%	0.0%
SSR Mining	SSRM	\$10.54	1.14	0.60	0.93	4.6%	0.0%	0.0%	2.20	1.57	1.96	2.8%	0.0%	0.0%
Intermediate/Junior Gold Producers														
Alamos Gold	AGI	\$12.99	0.52	0.53	0.69	2.0%	-7.0%	-2.8%	1.33	1.30	1.49	1.1%	-3.7%	-1.8%
New Gold	NGD	\$1.44	-0.02	0.12	0.20	33.33%	-42.9%	-39.4%	0.43	0.49	0.72	1.9%	-16.4%	-15.1%
Primary Silver Producers														
Pan American Silver	PAAS	\$15.48	0.20	0.48	1.08	33.3%	0.0%	0.0%	1.49	1.96	2.43	3.6%	-0.5%	0.0%
Royalty/Streaming Companies														
Franco-Nevada	FNV	\$110.04	3.44	3.18	4.32	0.9%	-1.9%	-2.0%	4.93	4.91	6.16	0.5%	-1.4%	-1.5%
Royal Gold	RGLD	\$118.38	3.52	4.29	4.82	2.0%	0.0%	0.0%	6.17	7.72	8.55	1.0%	0.0%	0.0%
Triple Flag	YTFPM	\$17.41	0.34	0.63	0.73	3.0%	0.0%	0.0%	0.77	0.97	1.06	1.1%	0.0%	0.0%
Wheaton Precious Metals	WPM	\$47.62	1.13	1.37	1.66	1.8%	0.0%	0.0%	1.61	2.15	2.43	1.3%	0.0%	0.0%
Aluminum producer														
Alcoa	AA	\$32.13	-2.84	1.99	5.39	0.0%	0.0%	0.0%	-0.51	5.11	8.77	-0.6%	0.1%	0.0%
Copper producers														
Freeport-McMoRan	FCX	\$41.41	1.47	0.82	1.79	-3.3%	-11.8%	0.0%	3.65	3.77	5.29	-0.5%	-2.8%	0.0%
Hudbay Minerals	HBM	\$5.35	0.19	0.82	0.86	11.8%	0.0%	0.0%	1.17	1.78	1.74	1.9%	0.0%	0.0%
Diversified producers														
Teck Resources	TECK	C\$40.38	5.13	3.96	3.77	-0.8%	-8.1%	0.0%	8.82	13.07	6.16	-1.1%	10.3%	-0.3%
Rare earths producers														
MP Materials	MP	C\$18.34	0.39	1.10	1.55	25.8%	-11.3%	-0.6%	0.37	1.44	1.89	22.7%	-7.4%	-0.6%
Uranium producers														
Cameco	YCCO	\$56.48	0.70	2.95	3.72	0.0%	0.0%	0.0%	0.95	3.23	4.69	0.0%	0.0%	0.0%
Zinc producers														
NEXA	NEXA	\$6.92	-0.31	0.25	0.27	0.0%	0.0%	0.0%	1.59	1.63	2.01	0.2%	0.3%	0.0%
Steel producers														
Commercial Metals Co.	CMC	\$48.22	7.40	5.85	5.25	0.0%	0.0%	0.0%	11.34	9.51	7.58	0.0%	0.0%	0.0%
Steel Dynamics	STLD	\$116.22	14.97	13.29	9.50	0.7%	0.3%	0.2%	19.79	17.32	11.86	1.8%	-2.6%	0.4%
Nucor Corp.	NUE	\$170.57	17.75	16.21	13.10	-0.9%	-0.1%	-0.1%	26.29	22.65	19.26	-1.1%	0.4%	-0.1%
United States Steel Corp.	X	\$48.35	4.33	3.91	2.40	-2.5%	-0.5%	0.4%	7.20	6.62	5.25	-0.8%	0.0%	-0.1%
Cleveland Cliffs	CLF	\$19.17	1.09	2.81	2.48	0.9%	0.0%	0.0%	4.33	4.27	4.13	5.4%	-2.7%	-2.6%
Reliance Steel & Aluminum Co.	RS	\$277.64	21.90	20.79	20.57	0.0%	0.0%	0.0%	27.50	28.55	27.55	0.0%	0.1%	0.0%

Source: BofA Global Research Estimates, Bloomberg

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Q4'23 EPS estimates vs. consensus

Below we provide a comparison of our estimates versus consensus on financial metrics.

Exhibit 4: Fourth quarter 2023 earnings preview (Q4'23)

The North American metals and mining sector kicks off Q4'23 reporting shortly

As of January 05, 2024	BofA Ticker	Share Price	Rat-ing	Repor- ting Date	EPS Q3'23A	EPS Q4'22A	BofA Q4'23E	QoQ Δ%	YoY Δ%	BBG Q4'23E	BofA 2023E	BBG 2023E	BofA 2024E	BBG 2024E
Senior gold producers														
Agnico Eagle Mines	AEM	\$52.63	B-1-7	15-Feb	0.44	0.41	0.50	14%	22%	0.43	2.17	2.06	2.34	2.29
Kinross Gold	KGC	\$5.71	C-3-7		0.12	0.09	0.14	17%	56%	0.09	0.46	0.40	0.45	0.34
Newmont Corporation	NEM	\$40.34	B-1-8		0.36	0.44	0.29	-19%	-34%	0.50	1.37	1.61	1.88	2.38
Barrick Gold	GOLD	\$17.49	B-1-8		0.24	0.21	0.30	25%	43%	0.26	0.87	0.81	1.18	1.08
Mid-Tier gold producers														
B2Gold	BTG	\$3.04	B-1-7		0.05	0.11	0.09	80%	-18%	0.08	0.28	0.29	0.34	0.28
Centerra Gold	YCG	C\$7.64	B-3-7		0.21	(0.06)	0.29	38%	nm	0.26	0.06	0.02	0.35	0.52
SSR Mining	SSRM	\$10.54	C-3-7		0.26	0.12	0.41	58%	242%	0.32	1.14	1.07	0.60	0.64
IAMGOLD	IAG	\$2.36	C-1-9		(0.01)	0.03	0.00	nm	nm	0.00	0.04	0.03	0.00	0.17
Eldorado Gold	EGO	C\$11.96	C-3-9		0.17	0.14	0.15	-12%	7%	0.15	0.52	0.51	0.36	0.61
Intermediate / junior gold producers														
Alamos Gold	AGI	\$12.99	B-2-7		0.14	0.09	0.11	-21%	22%	0.11	0.52	0.54	0.53	0.58
New Gold	NGD	\$1.44	C-3-9		0.00	(0.02)	0.03	nm	nm	0.02	(0.02)	0.10	0.12	0.18
Royalty/streaming companies														
Franco-Nevada	FNV	\$110.04	B-1-7	5-Mar	0.91	0.86	0.78	-14%	-9%	0.84	3.18	3.49	4.32	3.40
Triple Flag	YTFFM	C\$17.41	B-1-7		0.09	0.12	0.09	0%	-25%	0.08	0.63	0.33	0.63	0.47
Wheaton Precious Metals	WPM	\$47.62	B-1-7		0.27	0.23	0.32	19%	39%	0.30	1.37	1.11	1.37	1.31
Royal Gold	RGLD	\$118.38	B-3-7		0.76	0.91	0.92	21%	1%	0.81	4.29	3.44	4.29	4.26
Silver producers														
Pan American Silver	PAAS	\$15.48	C-1-8	21-Feb	0.01	(0.01)	0.07	nm	nm	0.12	0.20	0.18	0.48	0.73
Aluminum producers														
Alcoa	AA	\$32.13	C-2-7	17-Jan	(1.14)	(0.70)	(1.13)	-1%	61%	(0.84)	(2.84)	(2.62)	1.99	0.54
Copper producers														
Freeport	FCX	\$41.41	C-2-7	24-Jan	0.39	0.52	0.20	-49%	-62%	0.29	1.47	1.52	0.82	1.73
Hudbay Minerals	YHBM	C\$7.15	C-2-8		0.07	0.01	0.15	114%	nm	0.17	0.19	0.22	0.82	0.69
Diversified producers														
Teck Resources	TECK	\$40.38	C-1-7	21-Feb	0.77	1.09	1.32	71%	21%	1.34	5.13	5.25	3.96	5.77
Rare earths producers														
MP Materials	MP	\$18.34	C-1-9		0.01	0.42	(0.02)	nm	nm	(0.03)	0.39	0.33	1.10	0.51
Uranium producers														
Cameco	YCCO	C\$56.48	B-1-7		0.32	0.09	0.13	-59%	44%	0.25	0.70	0.85	2.95	1.61
Zinc producers														
Nexa	NEXA	C\$6.92	C-3-7		(0.43)	(0.04)	0.04	-109%	-200%	(0.07)	(0.31)	(0.77)	0.25	0.00
Steel Producers														
Commercial Metals Co.	CMC	\$48.22	C-1-7	8-Jan	1.69	2.24	1.43	-15%	-36%	1.46	7.40	7.54	5.85	5.33
Steel Dynamics	STLD	\$116.22	C-2-7	23-Jan	3.47	4.37	2.63	-24%	-40%	2.56	14.97	14.68	13.29	9.65
Cleveland Cliffs	CLF	\$19.17	C-2-9	29-Jan	0.54	(0.30)	(0.04)	nm	nm	0.05	1.09	1.17	2.81	1.96
Nucor Corp.	NUE	\$170.57	C-1-7	29-Jan	4.57	4.89	2.83	-38%	-42%	2.92	17.75	17.90	16.21	12.22
Reliance Steel & Aluminum Co.	RS	\$277.64	B-2-7	15-Feb	5.00	5.87	4.01	-20%	-32%	3.87	21.90	21.76	20.79	18.75
United States Steel Corp.	X	\$48.35	-6-		1.40	0.87	0.26	-81%	-70%	0.27	4.33	4.25	3.91	2.75

Source: BofA Global Research Estimates, Company Reports, Bloomberg. Notes: (3) estimates in CAD

BofA GLOBAL RESEARCH

Key commodity and currency prices

Exhibit 5: Quarterly change in various commodities and currencies

Metal performance in Q4 was mixed: gold and silver strong, base metals mostly weak.

Quarterly Average commodity prices	Q4'22A	Q3'23A	Q4'23A	QoQ	YoY	2022	2023	BofA '24E
AVG Gold PRICE (US\$/oz)	1,731	1,927	1,977	2.6%	14.2%	1,800	1,924	1,975
AVG Silver PRICE (US\$/oz)	21.29	23.56	23.25	-1.3%	9.2%	25.14	23.20	23.26
AVG Platinum PRICE (US\$/oz)	976	932	916	-1.7%	-6.2%	1,091	976	1,050
AVG Palladium PRICE (US\$/oz)	1,939	1,254	1,094	-12.8%	-43.6%	2,400	1,379	750
AVG Copper PRICE (US\$/lb)	3.64	3.80	3.70	-2.4%	1.8%	4.28	3.83	3.91
AVG Lead PRICE (US\$/lb)	0.95	0.98	0.96	-2.4%	0.8%	1.00	97.82	90.72
AVG Zinc PRICE (US\$/lb)	1.36	1.10	1.13	2.6%	-17.0%	1.36	1.20	1.08
AVG Nickel PRICE (US\$/lb)	11.55	9.25	7.84	-15.2%	-32.1%	8.38	9.88	8.51
AVG Metallurgical Coal Price (US\$/ton)	278	264	334	26.7%	20.0%			
AVG Uranium Price (US\$/lb)	49.49	59.07	77.52	31.2%	56.6%			
AVG Rare Earth NdPr Price (US\$/kg)	95	67	68	1.1%	-28.2%			
AVG C\$:US\$ Exchange Rate	0.74	0.75	0.73	-1.5%	-0.3%			
AVG Australian\$:US\$ Exchange Rate	0.66	0.65	0.65	-0.5%	-0.9%			
AVG Brazilian Real:US\$ Exchange Rate	0.19	0.20	0.20	-1.4%	6.2%			
AVG South African Rand:US\$ Exchange Rate	0.06	0.05	0.05	-0.4%	-6.0%			
AVG Peruvian Nuevo Sol:US\$ Exchange Rate	0.26	0.27	0.26	-2.8%	3.0%			
AVG Argentinian peso:US\$ Exchange Rate	0.61	0.32	0.22	-29.7%	-63.5%			
AVG Chilean peso:US\$ cents Exchange Rate	0.11	0.12	0.11	-4.8%	1.9%			
AVG Diesel spot price (\$USD/g)	3.37	2.97	2.67	-10.0%	-20.7%			
AVG WTI spot oil price (USD\$/bbl)	82.82	82.50	78.59	-4.7%	-5.1%			
AVG Euro: US\$ Exchange Ratio	1.02	1.09	1.08	-1.1%	5.3%			
AVG US\$:C\$ Exchange Rate	1.36	1.34	1.36	1.5%	0.3%			

Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

Provisional pricing impacts in Q4'23

Metal price performance was mixed in Q4'23 vs. the end of Q3'23. Comparing average prices during Q4'23 to the prices at the end of Q3'23, we note increases in uranium (+11%), gold (+7%) and silver (+5%). On the flipside, we saw decreases in palladium (-12%), nickel (-6%), zinc (-5%), and lead (-4%). Met coal was flat. Taking into account this price changes, notable provisional pricing impacts we estimate include: \$24m negative impact for FCX, \$20m positive benefit for LUN, and \$64m positive benefit for TECK.

Exhibit 6: Commodity price changes during the period

Metal price performance mixed in Q4'23 vs prior quarter-end.

Changes during the period	End of Q3'23	Q4'23 Average	QoQ Δ%	Price today
Gold PRICE (US\$/oz)	1,849	1,977	7%	2,045
Silver PRICE (US\$/oz)	22.18	23.25	5%	23.19
Platinum PRICE (US\$/oz)	908	916	1%	964
Palladium PRICE (US\$/oz)	1,248	1,094	-12%	1,031
Copper PRICE (US\$/t)	8,213	8,166	-1%	8,361
Lead PRICE (US\$/t)	2,200	2,120	-4%	2,042
Zinc PRICE (US\$/t)	2,643	2,498	-5%	2,538
Nickel PRICE (US\$/t)	18,440	17,288	-6%	16,152
Metallurgical Coal Price (US\$/t)	333	334	0%	333
Uranium Price (US\$/lb)	70.00	77.52	11%	92.00
Rare Earth NdPr Price (US\$/kg)	71.25	67.92	-5%	58.91

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Aluminum focus areas

Alcoa (AA)

(1) 2024 outlook (mainly shipments and capex): focus will mainly be on 2024 outlook, with key items being the aluminum shipments (amid ongoing restart of Alumar and Warrick smelters; BofAe 2.6 million tonnes) and capex (we expect AA to lower the capex from \$650 million guidance provided two years ago at the 2021 investor day, BofAe \$600m; VA consensus \$657m), **(2) San Ciprián:** progress of ongoing discussion with Spanish authorities, seeking viable long-term solutions for the loss-making refinery as well its smelter, which was originally scheduled for a phased restart from January 2024, **(3) Western Australia:** status/timeline on the Australian Environmental Protection Authority (EPA) decision to whether assess the Mining and Management Program (MMP) required (though the Western Australian (WA) government recently granted an exemption to allow AA to continue mining, in the event of an assessment), **(4) View on global aluminum** (given robust Chinese production / exports and timing of anticipated demand improvement in rest of the world) **and alumina market balance** (amid Chinese government restrictions and supply concerns over an explosion at an oil terminal Guinea, which accounts for around one-quarter of global bauxite production and 30% of China's usage), **(5) update on 2024 annual billet premiums** and management thoughts on **US Midwest / EU premiums** and regional demand visibility, **(6) quantitative guidance on cost tailwinds** from lower raw material prices for Q1'24, and **(7) working capital outlook** amid lower raw material prices and constrained EBITDA generation (at spot pricing).

Copper focus areas

Freeport McMoRan (FCX)

(1) Focus will be on 2024 guidance that is expected to be released with Q4'23 results. We'll be focused on costs and capex in particular; **(2)** Status of the construction of the **copper smelter** in Indonesia that will process concentrate from Grasberg (in-country): as of Q3'23 results it was ~84% and it is expected to be commissioned sometime in 2024; **(3)** Updates on **capital allocation** including future dividends, balancing the potential repayment of the remaining near-term debt maturities (the \$0.7mn of 4.55% 2024 Senior Notes) and **buying back its shares**; **(4)** Update on the **leach initiatives** which hold the potential to add around 800 million pounds (Mlbs) of annual copper production, not currently included in our modeling; **(5)** An update on the organic development pipeline including the **Bagdad 2x expansion** (~200Mlbs of new annual production) for which a feasibility study is in-process, and **El Abra** in Chile (~600Mlbs of annual new production); **(6)** recent views of **M&A** in the copper space given recent activity; **(7)** we expect a small positive \$24mn impact from **provisional pricing** in Q4'23 financial results; and **(8)** FCX's view on copper prices.

Hudbay Minerals (HBM)

(1) We'll seek commentary from management on the recent **Copper Mountain technical report** that was released 5-Dec-23, particularly as it relates to conservatism, optimization opportunities, or any other considerations as it relates to the mine; **(2) the project pipeline;** we forecast HBM's copper production increasing in 2024E given the Pampacancha ramp-up and full-year production from Copper Mountain - though thereafter production will decline, all else equal - we will seek commentary from management on potential **opportunities to backfill the decline**, **(3)** recent views of **M&A** in the copper space, given recent activity, and comments earlier in 2023 from President & CEO Peter Kukielski that HBM would be open to being acquired or combining with another similar sized company, if it made sense for shareholders; **(4)** an update on regional exploration efforts in both Peru and Manitoba; **(5)** an update on the



permitting process for the **Copper World** project in Arizona; **(6)** views on a potential **partner for Copper World**.

Teck Resources (TECK)

(1) 2024 guidance (expected on January 16, 2024) and updated 3-year guidance, with particular focus on revised production outlook for **Quebrada Blanca 2 (QB2)** and how it compares to the prior long-term guidance provided (BofAe at 205kt in 2024 vs VA consensus at 262kt and prior guidance of 285-315kt); **(2)** with the steelmaking coal spin-out announced, and now just pending the necessary approvals and eventual close of the transaction, we'll want to hear from management the company's capital allocation priorities and long-term vision and strategy for the business and with this, understanding how M&A fits into this as a focused base metals business; **(3)** A feasibility study on the **Quebrada Blanca Mill Expansion (QBME)** project (was expected to be completed by Q4'23), and we'll be watching for an update on its timing and potential contents; **(4)** with approval of the Social and Environmental Impact Assessment for **Zafranel**, TECK is working to update the capital and operating cost estimates, and we'll be watching for an update on early estimates and timing; **(5)** In October, Teck completed the feasibility study and submitted the Environmental Assessment application for the **Highland Valley Copper (HVC) 2040** project; we'll be looking for the latest on timing and latest thoughts on capex and other metrics; **(6)** an Environmental Impact Assessment and Permit application for development of the **San Nicolás** copper-zinc project was to be submitted in Q4'23 with a feasibility study to be completed in H1'24; and **(7)** we expect a \$64mn (\$0.07/share) positive impact from **provisional pricing** in Q4'23.

Zinc focus areas

Nexa Resources (NEXA)

(1) The **ramp-up of the Aripuanã zinc mine** in Brazil (viewed as a future flagship mine by management). In October, Nexa lowered its 2023 consolidated production guidance by 3-7%, due to slower ramp-up at Aripuanã. The company expects the mine to reach full capacity only in Q2'24 (vs. 2023 year-end prior), putting 2024 production guidance at risk; **(2)** an update on the process toward a potential board approval for the development of the Cerro Pasco project, that will combine the underground mines at El Porvenir and Atacocha in Peru; **(3)** plan for the repayment of NEXA's substantial debt relative to most industrial metal peers and what this means for NEXA's other **capital allocation priorities** including organic and inorganic growth; **(4)** management's latest thoughts on potential **M&A**, which is a key part of the current strategy with a previous desire for more copper exposure via M&A having been expressed; and **(5)** management's latest **view on the zinc market**.

Precious metals focus areas

SENIOR GOLD PRODUCERS

Agnico Eagle (AEM)

(1) 2024 production and 3-year guidance: AEM will release its 2024 and 3-year guidance with results, which we think will be of primary focus – we'll especially be focused on Detour Lake and Canadian Malartic given ongoing growth efforts at both projects. We'll also be paying close attention to cost guidance, as AEM is largely exposed to Canada where the labour market for mining remains very tight; **(2) Detour Lake:** At

Detour Lake, is the asset on track to achieve 28 million tonnes (Mt) of annual throughput by 2025? AEM plans to update the market in H1'24 on the plans to bring annual production at Detour to 1Moz per annum, that broadly will involve a combination increased mill throughput and higher-grade underground ore, and this is to include the results in H1'24 of a Detour Underground expansion study; **(3) Abitibi optimization:** AEM has an ambitious program to consolidate the Abitibi, with a target to add several hundred thousand ounces to additional production. In particular, at the Canadian Malartic complex there is at least 40,000 tonnes per day (tpd) of excess milling capacity. The Odyssey underground is the linchpin of filling the Malartic mill, but there are many more options to drive higher production in the Abitibi. What are the most prominent options being contemplated, and how quickly could these come about? Amalgamated Kirkland and the upper zones at Macassa could add 20-40koz annually. Upper Beaver and Wasamac are much longer-term options for up to 150-200koz annually each. **(4)** Upon closing of the acquisition of Kirkland Lake on 8-Feb-22, AEM stated it would further explore the **Fosterville** mine in Australia in order to determine its strategic direction within or without AEM. We think AEM will likely “kick the can down the road” on making a decision given what appears to us to be an incomplete understanding of the potential geological upside. We wonder if the asset could be sold either way, if the right offer price were presented to AEM; **(5)** Exploration results from Q3'23 results indicated new high-grade zones at Hope Bay and previously unknown mineralization at Kittila: these, as well as Odyssey should be a focus of the exploration update expected at the same time as Q4'23 results; **(6)** Whether Meliadine is on track achieve mill expansion to 6000tpd by YE24 and on budget; and **(7)** additional detail on the potential to extend the mine life at Meadowbank to beyond 2027.

Barrick Gold (GOLD)

(1) 2024 guidance: GOLD will release its 2024 guidance alongside with financials which we believe will be of greatest importance. In 2023, GOLD faced some challenges operationally which impacted results from both a production and cost perspective relative to 2023 guidance, and we'll be paying attention as to whether 2024 guidance assumes some conservatism/baked in buffers in light of this; **(2) Porgera:** Only recently, GOLD announced it had satisfied the agreed conditions necessary for the restart of operations before year-end. GOLD expects first gold pour in Q1'24. We'll be seeking commentary on ramp-up expectations and while they will be baked into guidance, we'll want to know of any risks that could hinder ability to meet guidance. **(3) Pueblo Viejo:** the ramp-up of Pueblo Viejo is continuing and will the mine achieve annual production in excess of 800koz as suggested by GOLD on the Q4'23 call. **(4) Nevada Gold Mines (NGM) especially within R&R:** NGM is GOLD's most prospective operation with respect to exploration potential and resource expansion. Look for comments on exploration upside, and potential resource growth conversion. This will be of focus within the updated R&R statement that is also expected for release with financial results **(5) M&A:** A predominant theme this year so far has been industry consolidation, particularly in the gold space given the blockbuster deal between Newmont (NEM) and Newcrest (NCM). GOLD CEO, Bristow has stated is “building the business for the long-term”, but we'll continue to watch how Barrick sees M&A fitting into this vision. **(6) Longer-term production guidance:** GOLD is also expect to provide indicative (i.e. charts not numbers) longer-term production guidance.

Kinross Gold (KGC)

(1) 2024 guidance: with results, KGC will provide 2024 guidance, we'll be focused on how this compares to prior provided guidance (as KGC provides 3-year consolidated guidance), **(2) Great Bear:** also with results, KGC is to release updated reserves and resources as well as a Great Bear exploration update. We'll be focused on the exploration update and KGC's commentary on work towards starting construction of an underground exploration decline, as well as any commentary on next major milestones or catalysts such as a study; **(3) Phase S at Round Mountain:** with Q3'23 results, KGC approved

mining of the Phase S open pit at Round Mountain and noted it is to provide an optimized phase S design with year-end results. We'll also seek further commentary on the synergy potential with Phase X and Gold Hill later in the mine life. **(4) Tasiast:** While Tasiast's expansion is complete now, we'll still be eyeing commentary on how the mine is performing versus expectations (i.e. outperformance or underperformance) and the consistency of operations **(5) Capital returns:** What will be KGC's focus with respect to capital returns in 2024, particularly how it views the current dividend versus buy-back opportunities and balancing that against key projects such as Great Bear and others.

Newmont Mining (NEM)

(1) 2024 guidance: Our focus with results will primarily be on the company's outlook for 2024 following the close of acquisition with Newcrest Mining (NCM) and see how this compares to the projections provided in the circular associated with the deal. Note that longer-term guidance is to be provided in mid-2024. **(2) integration/synergies:** we'll seek commentary on how the integration Newcrest is progressing and updates on synergies being realized relative to prior provided targets; **(3) Portfolio of assets and metals mix:** How much copper exposure makes sense for NEM in the long-run? Which assets are key divestment candidates, and what would be a reasonable timeframe? NCM has noted >\$2bn in asset sales being targeted. Does NCM's sizable (32%) equity interest in Lundin Gold (LUG) tempt NEM for a full acquisition? **(4) Key project progress:** With Q3'23 results, NEM disclosed Ahafo North and Tanami are tracking to previous timelines of H2'25 and on-budget. Do NEM remain confident in this view? **(5) Capital allocation priorities:** we'll be seeking NEM's commentary on the capital allocation priorities for the combined company – projects, dividends, M&A, amongst other elements, and the framework it will use to determine capital allocation. We think the dividend framework update is being watched very closely by investors.

MID-TIER PRECIOUS METAL PRODUCERS

B2Gold (BTG)

(1) Updates or commentary on the ongoing construction of the Goose Project particularly as it pertains to remaining capex, timelines (and any bottlenecks/critical path items) and also any further optimization opportunities BTG may pursue, **(3) more color on BTG's plans and expectations for the now-consolidated Gramalote project** – such as potential size of a smaller but higher-grade resource, sizing of a smaller plant and ballpark capex, amongst other parameters, **(4) further commentary on M&A filters**, particularly as BTG noted interest in potentially acquiring producing assets that are being “undervalued by the market” – we're keen on knowing jurisdictions of interest, size of asset, metal mix (i.e. any interest in copper-gold assets), **(5) capital allocation priorities** – looking forward, what are key priorities for capital allocation, i.e. M&A vs internal growth pipeline, potential for buy-backs supplementing the dividend post-Goose project completion, etc).

Centerra Gold (CG)

(1) Operations at Mt. Milligan: We'll be eyeing operations at Mount Milligan as usual after some challenges in 2023, and also we'll be seeking commentary on the optimization planning and strategy underway for 2024. **(2) Molybdenum assets:** we'll be seeking commentary ahead of the updated Thompson Creek FS in Q2'24, particularly around strategy for the asset and if the company has any other updates **(3) an update on the broader M&A strategy** that CG intends to focus in regions in which it currently has assets (Canada, Türkiye, USA); **(4) further detail on CG's Nevada strategy** that simply put, will focus on developing only-oxide, open-pit gold resources at or near the Gemfield property; **(6) Views on capital returns** which so far has focused on share buy-backs as opposed to increase in the base-level dividend.

Eldorado (EGO)

(1) the primary focus with respect to EGO are updates on the **ongoing construction progress at Skouries** in Greece, (2) we will also seek commentary on the **turnaround progress at Olympias**; (3) we're interested in commentary on EGO's pecking order or priority/focus areas with respect to its **project pipeline** amongst Perama Hill in Greece, Ormaque at Lamaque and exploration within Türkiye, (4) capital allocation priorities – EGO is one of the few producers in the sector that lacks any capital returns (i.e. no dividends or active buy-backs), we'll want a sense of how this may evolve looking forward particularly after the Skouries project is complete.

IAMGOLD (IAG)

(1) **Essakane**: IAG recently released a technical report for the asset which showed a mine life extension, yet the security situation in West Africa continues to remain a risk particularly given Essakane is located in the North where there have been more incidents. In light of this, we'll be seeking IAG view's on the future for the Essakane mine, and whether it could potentially become a divestment candidate, potentially when the Côté project goes into production (2) **Côté project**: Côté project remains on track for an early 2024 start. We'll be seeking colour on more granular timing and ramp-up expectations. Are there any risks that remain to the guided budget or the start-up timeframe? Note that IAG could conceivably announce first production before Q4'23 results are released; (3) **Westwood**: IAMGOLD said it expects Westwood to potentially show a turnaround– we'll be looking for updates and eyeing the operational performance at the mine, (4) **Longer-term strategy**: after the start-up of Côté and once ramp-up is de-risked, what will IAG's focus turn towards? What is the company's ultimate long-term vision and strategy?

Pan American Silver (PAAS)

(1) **All eyes on 2024 guidance**: particularly so as this will be the first full year of operations with the Yamana assets. We'll be focused on La Colorada Q4'23 production and 2024 guidance in particular given recent ventilation issues and constraints that lowered Q3'23 production; (2) **Jacobina study**: PAAS recently noted a study is underway to optimize the Jacobina mine and we'll seek commentary on what the strategy/thinking is with the asset. (3) **The latest in Guatemala**: At the giant Escobal silver mine, discussions appear to be constructive but "no date has been set for a potential restart of operations". Can PAAS provide any commentary or updates on how the consultation process is progressing? (4) **Further portfolio streamlining**: PAAS recently announced the divestiture of a number of non-core assets including its 56.25% stake in the MARA copper project; its 92.3% stake in the Morococha polymetallic-silver mine in Peru, and its 57.75% stake in the Agua de la Falda gold-copper project in Chile. What else in PAAS' portfolio remains a solid divestment candidate, and what is the timeframe for further streamlining of the portfolio? We think **La Arena** is an obvious divestiture given its future lies in copper production.

SSR Mining (SSRM)

(1) **All eyes will be on 2024 and 3-year guidance**: With Q3'23 results, SSRM disappointed the market suggesting that it would see lower production and higher costs near-term versus prior provided guidance. Prior to financials, SSRM release guidance which will be highly anticipated to get a clearer outlook, (2) In light of a number of **technical reports upcoming for SSRM's assets**, we'll be looking for any commentary on what to expect in these technical reports, particularly the approach to processing the Çakmaktepe ore at **Çöpler**, and also SSRM's thinking around longer-term mine sequencing at **Marigold** (3) **Hod Maden in Türkiye**: In May 2023, SSRM acquired a 40% interest in the Hod Maden project. SSRM is targeting first production for the project in 2027, after a full construction decision in 2024. We'll be seeking SSRM's thinking for timing and other project parameters with respect to this asset, (4) **Capital**

allocation: A hallmark of SSR is its capital allocation strategy, hiking dividends and buying back stock. On this front, we'll be seeking colour on what SSRM's strategy is looking into 2024 and onwards.

JUNIOR/INTERMEDIATE GOLD PRODUCERS

New Gold (NGD)

(1) prior to financial results, we expect NGD to release 2024 guidance but also 3-year guidance (inaugural) which we think investors will view as a catalyst as it will provide more clarity on the near-term production profile and free cash flow outlook near-term, (2) **C-Zone development progress** particularly with the ramp-up to commercial production which is more technically complex for a block cave mine given self-caving and ultimately takes more time than a regular underground mining operation (3) **Rainy River underground** development updates; (4) commentary on the company's **longer-term strategy** and the thinking on the future of the business (i.e. project pipeline, M&A, capital allocation priorities if any, etc).

Alamos Gold (AGI)

(1) we expect Alamos to release 2024 and 3-year guidance along with Q4'23 operational results prior to financials. Given AGI has provided 3-year guidance in the past, including consolidated costs and capex, we'll be particularly eyeing changes versus prior provided guidance for 2024 and 2025, especially on costs/capex, (2) commentary or additional color on the upcoming development plan at **Puerto Del Aire (PDA)** – at GFA 2023, CEO John McCluskey noted that PDA continues to grow in size and the company sees potential for the resource to hit 2 million ounces (Moz) longer-term, however, the latest drilling cut-off as per our understanding that will inform the development plan is 31-July-23; based on this, we'll be looking for AGI's messaging on the size of the new mill (previous messaging was around 1,500 tonnes per day (tpd)) and the capex associated with it (previous messaging was ballpark \$100mn+) and whether AGI will contemplate a more 'phased' expansion approach (or opportunities to expand over-time as the resource grows), (2) **updates on the ongoing expansion at Island**; based on our understanding the project continues to track well to its budgeted capex and timelines; and (3) any commentary on the timing of the **Lynn Lake** project with respect to next steps and broadly expectations around the timing of the capex spend.

PRECIOUS METALS ROYALTY & STREAMING COMPANIES

Franco Nevada (FNV):

(1) **Cobre Panama:** we'll be seeking FNV's thinking around Cobre Panama given the shutdown of operations and unclear future for the asset and how FNV views its own risks in that context; (2) **Capital returns:** With around \$2.3 billion of available liquidity, FNV has the ability to execute on substantial royalty and/or streaming transactions. But in the absence of sizeable deal opportunities, could a larger dividend increase be in the offing? (2) **Metal mix and exposure:** How does FNV view its metal mix and exposure in the current price environment, particularly with the recent strength in energy prices? Could lithium, uranium, and rare earths make sense in Franco's portfolio? (3) **Deal pipeline:** What does the current deal opportunity look like for FNV, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair), (4) **growth and project ramp-up:** We'll be seeking commentary on key growth and ramp-up assets pertaining to FNV: Argonaut Gold Magino (2% royalty, commercial production Q4'23 after first pour June 2023), Equinox's Greenstone project (first pour expected H1'24), amongst other smaller projects in the portfolio that can shape operations over the next year.

Royal Gold (RGLD):

(1) What should we be looking for in terms of catalysts within the portfolio in the next 12-24 months? (2) **Deal pipeline:** What does the current deal opportunity look like for RGLD, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair), (4) **Mount Milligan:** operator Centerra Gold (CGAU) has noted it is reviewing optimization opportunities at the mine, we'll be seeking if RGLD has any colour or commentary; (5) **Pueblo Viejo:** commentary from Barrick (GOLD) on the plant expansion commissioning ramp-up will be key for RGLD's gold/silver stream.

Triple Flag (TFPM):

(1) **M&A:** Given the success of the Maverix transaction to date, does it make sense for Triple Flag to continue to pursue potential M&A with other royalty/streaming companies? Are there opportunities in M&A? (2) **Deal pipeline:** What does the current deal opportunity look like for TFPM, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair). (3) **New deal announcements:** In prior quarters, TFPM has announced new deals, thus we'll be eyeing potential announcements with results.

Wheaton Precious Metals (WPM):

(1) **Deal pipeline:** What does the current deal opportunity look like for WPM, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair)? (2) **Salobo III mine expansion:** We'll be seeking commentary/colour on the ramp-up (full capacity is expected in Q4'24), (3) **Voisey's Bay:** the underground mine extension at Voisey's Bay is ongoing and we'll be seeking colour on further progress (4) **Updates on other key organic growth drivers** that will drive WPM's impressive 5-year and 10-year growth including: Constanca, Stillwater, Marmato (all brownfield) as well as greenfield projects Blackwater, Goose, Curipamba, Marathon, Santo Domingo, Toroparu and Copper World; we note very positive commentary from WPM management on the Q3'23 conference call, with management telegraphing WPM could hit over a million GEOs per year shortly after 2027.

Rare Earths focus areas

MP Materials (MP)

(1) **Stage II:** Following the official production & shipment of 50 tonnes of separated Neodymium-Praseodymium (NdPr) oxide in late-Q3'23, investors will mainly be focused on the progress of the ramp-up in Q4'23 and the outlook for **full year 2024 production** (against the full run rate of >6,000 tonnes, BofAe at 4,400 tonnes); (2) **NdPr outlook** with pricing once again reverting to near \$60/kg (after rebounding to >\$70/kg in September 2023), (3) progress on **Stage III** project and update on adding new supply contracts with other automakers; (4) more details on the recently announced **Upstream 60K** project, and (5) update on **heavy rare earth project** with potential for additional funding from the Department of Defense.

Steel focus areas

Commercial Metals (CMC)

(1) **2024 non-residential construction outlook:** Focus will mainly be on management's outlook on 2024 construction season. As of the Q4'FY23 (November

2023), order backlogs were down 8% YoY but new project bid volumes were up 27% YoY. Per ARTBA, YTD'23 (through November) contract awards are up 9% YoY and State DoT highway budgets for 2024 are expected to be increase another 14% YoY, **(2) Rebar fab pricing:** Based on the order backlog and current project bids, outlook for 2024 downstream product pricing, **(3) Emerging Businesses Group:** Following the recent changes to segment reporting, focus will be on near-to-medium term outlook for the Emerging Businesses Group segment (which includes CMC's Tensar geogrid and Geopier, CMC Construction Services, Performance Reinforcing Steel, CMC Anchoring Systems, and Impact Metals operations), **(4) Capital allocation:** Given relatively high capex spending for the next two years and more normalized rebar spreads, investors will be looking for management's latest thinking on capital allocation and M&A, **(5) Arizona 2 micro mill:** Update on the commissioning/ramping process (with guide for achieving 400kt incremental volumes in 2024 and turning EBITDA positive in H1'24), **(6) West Virginia project (500ktpa):** status of the project and next milestone, and **(7) EU / Poland:** current state of the market in Poland and outlook for 2024.

Cleveland-Cliffs (CLF)

(1) Capital allocation: following the X – NSC announcement, management indicated that it will now re-focus its capital allocation priorities on more aggressive share buybacks. Investors would also be looking for CLF's latest thinking on reinstatement of dividends and growth strategy; **(2) Management's view on increased competitiveness in automotive/electrical steel** (post X-NSC; assuming regulatory approvals), **(3) Fixed price automotive contracts:** pricing (and volume) details for annual automotive contracts (that reset on January 1st); **(4) Mill ordering activity** and thoughts on **sustainability of HRC price**, following the >65% rally seen in the past three months; and **(5) Cost reduction** achieved in Q4'23 (guide: \$15/short ton (/st)) and update on additional cost cuts anticipated in 2024.

Nucor (NUE)

(1) Mill ordering activity and thoughts on sustainability of HRC price, following the >65% rally seen in the past three months; **(2) 2024 steel demand outlook**, mainly related to **non-residential construction market** and whether the company is seeing any 'meaningful' signs of infrastructure demand starting to flow through; **(3) Outlook for plate pricing** in 2024 given subdued lead times; **(4) Brandenburg plate mill ramp-up** and confidence in achieving >0.5m ton shipments in 2024; and **(5) steel products order backlog** and the underlying strength in its diversified portfolio (fabricated rebar, tubular, overhead doors, towers, metal panels etc.).

Reliance Steel & Aluminum (RS)

(1) Q1'24 outlook: BofAe EPS at \$5.61 (vs. Bloomberg consensus at \$5.21) based on 3% quarter-on-quarter (QoQ) increase in pricing, 9% higher shipments (typical seasonality +6-8%) and modest expansion (150bps) in FIFO gross margins; **(2) 2024 LIFO update** (guide of \$140m income in 2023); **(3) end-market demand**, particularly for **automotive tolling** (given anticipated rebound in activity post-strike), **non-residential construction** (guided to remain healthy, with potential support from infrastructure projects related to IIJA), **semiconductors** (which is seeing near term weakness), and **commercial aerospace** (with build rates continuing to improve); **(4) a progress update on volume growth** strategy; and **(5) M&A outlook.**

Steel Dynamics (STLD)

(1) Following the recent commentary (Q4'24 guidance on December 15, 2023) from management indicating that steel joist and deck order activity has improved, investors will mainly be focused on the **fabrication order backlog** and color on **new bidding activity** (including pricing and volumes for 2024); **(2) 2024 steel demand outlook and mill ordering activity** since the most recent price hike in early-January (CLF announced

a base HRC price of \$1,150/st); **(3) Sinton:** Q4'23 operating performance and the ramp up profile (guided to achieve 80% utilization for the full year 2024), **(4)** management's latest thinking on **dividend** (following 25-30% YoY increases seen in previous two years) and **buybacks** (given heavy capex budget for 2024), **(5)** progress of the \$2.5bn 650ktpa **aluminum rolling mill** project and status of negotiations with potential customers, and **(6) scrap** price outlook.

US Steel (X)

(1) Update on announced **agreement to be acquired by Nippon Steel Corporation (NSC)** for \$55/share, including feedback from investors, United Steel Workers union and regulators; **(2)** volume and pricing details for **2024 fixed-price automotive contracts**; **(3)** Update on sensitivities for previously announced **2024 EBITDA guidance** of \$2bn (which was based on average HRC price of \$750/st); **(4) progress of Big River Steel 2 construction** and details of operational footprint adjustments planned to offset the increment production from BRS2; **(5)** current state of the market in **Slovakia** and outlook for 2024; and **(6)** ramp-up of the new non grain-oriented (**NGO**) electrical line at Big River steel (guided to ship 100kt in 2024).

Uranium focus areas

Cameco (CCJ)

(1) the progress of the ramp-up of the **McArthur River** mine that is now restarting, and is a key driver of lower costs and higher margins for CCJ going forward into 2024E and 2025E; McArthur River's Q4'23 production will be telling of how the ramp-up has progressed, given that it requires a very strong quarter for CCJ to meet 2023 production guidance **(2)** CCJ is expected to report the updated size of the year-end 2023 contract book vs. the last reported level of 215Mlbs in Q1'23 results. Reports of many request for proposals (RFPs) from European utilities and potentially more from the U.S. and Korean utilities continued in Q4'23; **(3)** the status of the **Port Hope conversion facility expansion**; **(4)** management views on U_3O_8 and conversion (UF_6) markets; **(5)** now that the Westinghouse Electric (WEC) acquisition is closed, we'll be seeking more commentary from management on the integration and any color beyond what was provided in CCJ's investor day at which CCJ noted that its targeted revenue and adjusted EBITDA growth for the WEC subsidiary, is in fact in-excess of the 3.6% guidance provided in early November.

BofA vs Bloomberg consensus (Q4'23)

Exhibit 7: Q4'23 Comparison of Key Metrics to Consensus

Below, we set out our Q4'23 financial estimates for our coverage vs. the Bloomberg consensus.

		Gold Production (oz)			Total Cash Costs (US\$/oz)			EBITDA (US\$m)			EPS (US\$m)		Abs
		BofA	Consensus	% diff	BofA	Consensus	% diff	BofA	Consensus	% diff	BofA	Consensus	diff
<u>Senior gold producers</u>													
Agnico Eagle Mines	AEM	894,839	876,800	2.1%	\$894	\$919	-2.8%	865	780	11.0%	0.50	0.43	+0.07
Barrick Gold	GOLD	1,073,408	1,123,700	-4.5%	\$894	\$861	3.8%	1,496	1,562	-4.2%	0.30	0.26	+0.05
Kinross Gold	KGC	562,431	581,700	-3.3%	\$911	\$951	-4.2%	522	450	15.9%	0.14	0.09	+0.05
Newmont Corp.	NEM	1,758,755	1,730,654	1.6%	\$1,049	\$949	10.6%	924	1,248	-26.0%	0.29	0.50	-0.21
<u>Mid-tier gold producers</u>													
B2Gold	BTG	269,944	267,200	1.0%	\$819	NA	NM	282	266	6.1%	0.09	0.08	+0.01
Centerra Gold	YCG	128,215	132,200	-3.0%	\$655	\$571	14.8%	152	139	9.5%	0.29	0.26	+0.03
IAMGOLD	IAG	113,232	NA	NA	\$1,312	\$1,184	10.8%	70	72	-3.3%	0.00	0.00	-0.00
SSR Mining	SSRM	214,232	N/A	NM	\$1,009	NA	NM	186	166	12.4%	0.41	0.32	+0.09
Eldorado Gold	EGO	128,453	134,200	-4.3%	\$742	\$778	-4.6%	120	131	-8.6%	0.15	0.17	-0.02
<u>Intermediate and junior gold producers</u>													
Alamos Gold	AGI	134,200	N/A	NM	\$889	\$866	2.6%	124	115	7.2%	0.11	0.11	-0.00
New Gold	NGD	80,694	N/A	NM	\$1,176	\$1,005	17.0%	84	79	6.4%	0.03	0.02	+0.01
Pan American Silver	PAAS	80,447	N/A	NM	\$1,076	\$1,061	-1.4%	202	219	-8.0%	0.07	0.12	-0.05
<u>Silver producers</u>		Silver Production (oz)			Total Cash Costs (US\$/oz)			EBITDA (US\$m)			EPS (US\$m)		
Pan American Silver	PAAS	5,522,176	N/A	NM	\$14.49	\$14.51	0.1%	202	219	-8.0%	0.07	0.12	-0.05
<u>Royalty/streaming companies</u>		Attr. Gold Equivalent Output (oz)			Total Cash Costs (US\$/oz)			EBITDA (US\$m)			EPS (US\$m)		
Franco-Nevada	FNV	175,308	N/A	NM	NA	NA	NM	272	261	4.1%	0.78	0.84	-0.06
Royal Gold	RGLD	79,500	67,700	17.4%	NA	NA	NM	119	111	6.9%	0.92	0.81	+0.11
Triple Flag	YTFPM	25,428	N/A	NM	NA	NA	NM	41	40	0.4%	0.09	0.08	+0.01
Wheaton Precious Metals	WPM	148,323	N/A	NM	NA	NA	NM	223	200	11.5%	0.32	0.30	+0.02
<u>Aluminum producer</u>		Aluminum Output (kt)			C1 Cash Costs (US\$/lb)			EBITDA (US\$m)			EPS (US\$m)		
Alcoa	AA	530	533	-0.6%	n/a	n/a	NM	110	103	6.3%	(1.13)	(0.84)	-0.29
<u>Copper producers</u>		Copper Output (kt)			C1 Cash Costs (US\$/lb)			EBITDA (US\$m)			EPS (US\$m)		
Freeport	FCX	492.8	472.2	4.4%	\$1.45	NA	NM	2,096	2,223	-5.7%	0.20	0.29	-0.09
Hudbay Minerals	YHBM	50.3	45.0	11.7%	\$0.83	0.61	-27.5%	251	232	8.1%	0.15	0.17	-0.02
NEXA	NEXA	9.6	N/A	NM	n/a	NA	NM	117	113	3.8%	0.04	(0.07)	+0.11
Teck	TECK	70.8	N/A	NM	\$1.78	2.63	47.9%	1,741	1,684	3.4%	1.32	1.34	-0.02
<u>Diversified producers</u>		Met Coal Output (kt)			Total Cash Costs (US\$/t)			EBITDA (US\$m)			EPS (US\$m)		
Teck	TECK	5,700	6,092.9	-6.4%	\$145.00	NA	NM	1,741	1,684	3.4%	1.32	1.34	-0.02
<u>Rare earth producers</u>		Contained REO production (mt)			Production cost of REO (\$/mt)			EBITDA (US\$m)			EPS (US\$m)		
MP Materials	MP	10,886	NA	NM	\$1,653	NA	NM	4	8	-49.8%	(0.02)	(0.03)	+0.01
<u>Uranium producers</u>		U ₃ O ₈ produced+purched (Mlbs)			Total Cash Costs (US\$/oz)			EBITDA (US\$m)			EPS (US\$m)		
Cameco	YCCO	12.8	NA	NM	\$55.34	NA	NM	202	231	-12.2%	0.13	0.25	-0.12
<u>Zinc producers</u>		Zinc Output (kt)			Zinc mining cash cost (US\$/t)			EBITDA (US\$m)			EPS (US\$m)		
NEXA	NEXA	84.8	NA	NM	\$0.18	NA	NM	117	113	3.8%	0.04	(0.07)	+0.11
<u>Steel</u>		Steel Output (kt)			EBITDA / Tonne (US\$/t)			EBITDA (US\$m)			EPS (US\$m)		
Cleveland Cliffs	CLF	4,272	NA	NM	\$76	NA	NM	278	315	-11.6%	(0.04)	0.05	-0.09
Commercial Metals Co.	CMC	1,419	NA	NM	\$249	NA	NM	340	349	-2.7%	1.69	1.82	-0.13
Nucor Corp.	NUE	4,819	NA	NM	\$238	NA	NM	1,263	1,293	-2.3%	2.83	2.92	-0.09
Reliance Steel & Aluminum Co.	RS	NA	NA	NM	NA	NA	NM	378	367	2.8%	4.01	3.87	+0.14
Steel Dynamics	STLD	2,473	NA	NM	\$218	NA	NM	677	666	1.6%	2.63	2.56	+0.07
United States Steel Corp.	X	3,656	NA	NM	\$80	NA	NM	257	265	-3.1%	0.26	0.27	-0.01

Source: BofA Global Research estimates, Bloomberg. Notes: (1) Current quarter production figures are actual reported. Note SSRM, KGC are gold-equivalent ounces (GEO) production.

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Operating data comparison (Q4'23)

Exhibit 8: Q4'23 Production and Total Cash Cost Forecasts

Below, we set out our Q4'23 operational estimates for our coverage vs. the Bloomberg consensus.

		Annual Change						Sequential Change			
		Gold Production (oz)			Total Cash Costs (US\$/oz)			Gold Production (oz)		Total Cash Costs (US\$/oz)	
		Q4'22A	Q4'23E	YoY %	Q4'22A	Q4'23E	YoY %	Q3'23A	QoQ %	Q3'23A	QoQ %
Senior Gold Producers											
Agnico Eagle Mines	AEM	799,438	894,839	11.9%	\$863	\$894	3.5%	850,429	5.2%	\$919	-2.7%
Barrick Gold	GOLD	1,120,000	1,073,408	-4.2%	\$868	\$894	2.9%	1,039,000	3.3%	\$912	-2.0%
Kinross Gold	KGC	595,683	562,431	-5.6%	\$842	\$911	8.2%	585,449	-3.9%	\$911	0.0%
Newmont Corp.	NEM	1,565,000	1,758,755	12.4%	\$940	\$1,049	11.6%	1,291,000	36.2%	\$1,019	3.0%
Mid-Tier Gold Producers											
B2Gold	BTG	367,870	269,944	-26.6%	\$618	\$819	32.5%	241,526	11.8%	\$827	-1.0%
Centerra Gold	YCG	53,222	128,215	140.9%	\$790	\$655	-17.1%	126,221	1.6%	\$643	1.9%
Eldorado Gold	EGO	128,453	132,890	3.5%	\$741	\$742	0.2%	121,030	9.8%	\$698	6.3%
IAMGOLD	IAG	185,000	113,232	-38.8%	\$1,126	\$1,312	16.5%	109,000	3.9%	\$1,400	-6.3%
SSRM Mining	SSRM	182,655	214,232	17.3%	\$1,019	\$1,009	-1.0%	159,863	34.0%	\$1,045	-3.4%
Eldorado Gold	EGO	128,453	132,890	3.5%	\$741	\$742	0.2%	121,030	9.8%	\$698	6.3%
Intermediate/Junior Gold Producers											
Alamos Gold	AGI	134,200	126,223	-5.9%	\$810	\$889	9.8%	135,400	-6.8%	\$835	6.5%
New Gold	NGD	80,694	80,447	-0.3%	\$1,035	\$1,176	21.70%	82,225	33.80%	\$744	58.1%
Pan American Silver	PAAS	164,330	257,366	56.6%	\$1,077	\$1,076	-0.1%	244,300	5.3%	\$1,187	-9.3%
Silver Producers											
		Silver Production (oz)			Total Cash Costs (US\$/oz)			Silver Production (oz)		Total Cash Costs (US\$/oz)	
Pan American Silver	PAAS	4,763,000	5,522,176	15.9%	\$14.41	\$14.49	0.5%	244,300	2160.4%	\$13.13	10.3%
Royalty/Streaming Companies											
		Attr. Gold Equivalent Output (oz)			Total Cash Costs (US\$/oz)			Attrib. GEO (oz)		Total Cash Costs (US\$/oz)	
Franco-Nevada	FNV	183,886	175,308	-4.7%	NA	NA	NM	160,848	9.0%	NA	NM
Royal Gold	RGLD	79,500	78,986	-0.6%	NA	NA	NM	71,900	9.9%	NA	NM
Triple Flag	YTFPM	25,428	26,981	6.1%	NA	NA	NM	25,629	5.3%	NA	NM
Wheaton Precious Metals	WPM	148,323	163,455	10.2%	NA	NA	NM	154,800	5.6%	NA	NM
Aluminum Producer											
		Aluminum Output (kt)			C1 Cash Costs (US\$/lb)			Aluminum Output (kt)		C1 Cash Costs (US\$/lb)	
Alcoa	AA	n/a	n/a	n/a	n/a	n/a	-	n/a	n/a	n/a	-
Copper Producers											
		Copper Output (kt)			C1 Cash Costs (US\$/lb)			Copper Output (kt)		C1 Cash Costs (US\$/lb)	
Freeport	FCX	473	493	4.3%	\$1.53	\$1.45	-5.4%	503	-2.0%	\$1.73	-16.1%
Hudbay Minerals	HBM	29	50	71.7%	\$1.08	\$0.83	-22.7%	42	19.9%	\$0.41	103.9%
NEXA	NEXA	9.3	9.6	3.1%	n/a	n/a	-	9.2	4.2%	n/a	-
Teck	TECK	65	71	8.9%	\$1.73	\$1.78	2.6%	72	-1.7%	\$1.83	-2.8%
Diversified Miner											
		Met Coal Output (kt)			Total Cash Costs (US\$/t)			Met Coal Output (kt)		Total cash costs (US\$/t)	
Teck	TECK	4,900	5,700	16.3%	\$146.74	\$145.00	-1.2%	5,500.0	3.6%	\$150.58	-3.7%
Rare Earth											
		Contained REO production (mt)			Production cost of REO (\$/mt)			Contained REO production		Production cost of REO	
MP Materials	MP	11,998	10,886	-9.3%	\$1,449	\$1,653	14.1%	10,300	5.7%	\$1,750	-5.5%
Uranium Producer											
		U ₃ O ₈ produced+urchased (Mlbs)			Total cash costs (US\$/lb)			U ₃ O ₈ produced+urchased		Total cash cost	
Cameco	YCCO	9.5	12.8	34.7%	\$47.27	\$55.34	17.1%	4.2	204.8%	\$51.88	6.7%
Steel Producers											
		Steel Output (kt)			EBITDA / Tonne (US\$/t)			Steel Output (kt)		EBITDA / Tonne (US\$/t)	
Cleveland Cliffs	CLF	4,049	4,272	5.5%	\$35	\$76	114.2%	4,331	-1.4%	\$165	-54.1%
Comercial Metals Co.	CMC	1,440	1,419	-1.5%	\$249	\$249	0.0%	1,476	-3.8%	\$246	1.3%
Nucor Corp.	NUE	4,871	4,819	-1.1%	\$374	\$238	-36.4%	5,301	-9.1%	\$322	-26.1%
Reliance Steel & Aluminum Co.	RS	NA	NA	NM	NA	NA	NM	NA	NA	NA	NA
Steel Dynamics	STLD	2,433	2,473	1.6%	\$283	\$218	-23.1%	2,525	-2.1%	\$274	-20.4%
United States Steel Corp.	X	3,049	3,656	19.9%	\$141	\$80	-43.5%	3,796	-3.7%	\$168	-52.7%
Zinc producer											
		Zinc Output (kt)			Zinc cash cost (US\$/t)			Zinc Output (kt)		Zinc cash cost	
Teck	TECK	144	191	32.8%	\$0.31	\$0.52	70.3%	157	21.2%	\$0.43	20.5%
NEXA	NEXA	75	85	13.2%	\$0.18	\$0.38	NM	66	27.9%	\$0.35	7.2%

Source: BofA Global Research Estimates. Notes: (1) Current quarter production figures are actual reported.

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BofA vs. Consensus (2024E)

2024E production metrics

Exhibit 9: BofA vs. Bloomberg Consensus and Visible Alpha (VA) – Production

BofA vs. consensus across production metrics

Company Name	Bloomberg Ticker	BofA Ticker	BofA Estimate	2024E Production		BofAe Δ% vs.	
				Bloomberg Cons	Visible Alpha	Bloomberg Cons	Visible Alpha
<u>Senior Gold Producers</u>				Gold production (koz)			
Agnico Eagle Mines	AEM US EQUITY	AEM	3,497	3,534	3,560	-1%	-2%
Barrick Gold	GOLD US EQUITY	GOLD	4,189	4,465	4,419	-6%	-5%
Kinross Gold	KGC US EQUITY	KGC	2,085	2,086	2,105	0%	-1%
Newmont	NEM US EQUITY	NEM	7,482	7,180	7,182	4%	4%
<u>Mid-Tier Gold Producers</u>				Gold production (koz)			
B2Gold	BTG US EQUITY	BTG	1,013	993	902	2%	12%
Centerra Gold	CGAU US EQUITY	CGAU	372	396	388	-6%	-4%
Eldorado Gold	ELD CN EQUITY	EGO	538	532	539	1%	0%
IAMGOLD	IAG US EQUITY	IAG	497	647	730	-23%	-32%
Pan American Silver	PAAS US EQUITY	PAAS	971	1,015	1,064	-4%	-9%
SSR Mining	SSRM US EQUITY	SSRM	508	614	508	-17%	0%
<u>Intermediate/Jr Golds</u>				Gold production (koz)			
Alamos Gold	AGI US EQUITY	AGI	492	495	494	-1%	0%
New Gold	NGD US EQUITY	NGD	372	N/A	373	N/A	0%
<u>Royalty & Streamers</u>				Attrib. Gold Equivalent Output (k GEO)			
Franco-Nevada	FNV US EQUITY	FNV	620	NA	NA	N/A	N/A
Royal Gold	RGLD US EQUITY	RGLD	363	NA	NA	N/A	N/A
Triple Flag	TFPM CN EQUITY	YTFPM	130	NA	NA	N/A	N/A
Wheaton Precious Metals	WPM US EQUITY	WPM	731	NA	NA	N/A	N/A
<u>Primary Silver Producers</u>				Silver production (Moz)			
Pan American Silver	PAAS US EQUITY	PAAS	21.0	28.3	26.6	-26%	-21%
<u>Aluminum Producers</u>				Aluminum Output (kt)			
Alcoa	AA US EQUITY	AA	2,150	2,253	2,230	-5%	-4%
<u>Copper Producers</u>				Copper Output (kt)			
Freeport	FCX US EQUITY	FCX	1,960	1,996	1,915	-2%	2%
Hudbay Minerals	HBM US EQUITY	HBM	171	167	167	3%	3%
Teck	TECK CN EQUITY	TECK	492	NA	542	N/A	-9%
<u>Rare Earth</u>				Contained REO production (mt)			
MP Materials	MP US EQUITY	MP	42	NA	36	N/A	17%
<u>Uranium Producer</u>				U ₃ O ₈ produced+ purchased (Mlbs)			
Cameco	CCJ US EQUITY	YCCO	26.0	NA	28.8	N/A	-10%
<u>Steel Producers</u>				External shipments (k short tons)			
Cleveland Cliffs	CLF US EQUITY	CLF	16,200	NA	16,155	N/A	0%
Commercial Metals Co.	CMC US EQUITY	CMC	6,227	NA	6,167	N/A	1%
Nucor Corp.	NUE US EQUITY	NUE	27,843	NA	26,812	N/A	4%
Reliance Steel & Aluminum Co.	RS US EQUITY	RS	N/A	NA	NA	N/A	N/A
Steel Dynamics	STLD US EQUITY	STLD	15,029	NA	15,135	N/A	-1%
United States Steel Corp.	X US EQUITY	X	15,150	NA	15,847	N/A	-4%
<u>Zinc producer</u>				Zinc Output (kt)			
NEXA	NEXA CN EQUITY	NEXA	341	NA	344	N/A	-1%

Source: BofA Global Research Estimates, Bloomberg, Visible Alpha

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2024E cost metrics

Exhibit 10: BofA vs. Bloomberg Consensus and Visible Alpha (VA) - Cost

BofA vs. consensus across cost metrics

Company Name	Bloomberg Ticker	BofA Ticker	BofA Estimate	2024E Cash Costs		BofAe Δ% vs.	
				Bloomberg Cons	Visible Alpha	Bloomberg Cons	Visible Alpha
<u>Senior Gold Producers</u>				Total cash costs (\$/oz Au)			
Agnico Eagle Mines	AEM US EQUITY	AEM	\$868	\$802	\$832	8%	4%
Barrick Gold	GOLD US EQUITY	GOLD	\$829	\$839	\$858	-1%	-3%
Kinross Gold	KGC US EQUITY	KGC	\$947	\$946	\$928	0%	2%
Newmont	NEM US EQUITY	NEM	\$1,045	\$935	\$949	12%	10%
<u>Mid-Tier Gold Producers</u>				Total cash costs (\$/oz Au)			
B2Gold	BTG US EQUITY	BTG	\$751	\$776	\$805	-3%	-7%
Centerra Gold	CGAU US EQUITY	CGAU	\$818	\$694	\$743	18%	10%
Eldorado Gold	ELD CN EQUITY	EGO	\$742	\$829	\$767	-10%	-3%
IAMGOLD	IAG US EQUITY	IAG	\$1,303	\$1,082	\$1,077	20%	21%
Pan American Silver	PAAS US EQUITY	PAAS	\$1,059	\$792	\$1,008	34%	5%
SSR Mining	SSRM US EQUITY	SSRM	\$1,164	\$1,082	\$2,372	8%	-51%
<u>Intermediate/Jr Golds</u>				Total cash costs (\$/oz Au)			
Alamos Gold	AGI US EQUITY	AGI	\$759	\$759	\$739	0%	3%
New Gold	NGD US EQUITY	NGD	\$731	\$941	\$531	-22%	38%
<u>Royalty & Streamers</u>				Total cash costs (\$/oz Au)			
Franco-Nevada	FNV US EQUITY	FNV	NA	NA	NA	N/A	N/A
Royal Gold	RGLD US EQUITY	RGLD	NA	NA	NA	N/A	N/A
Triple Flag	TFPM CN EQUITY	YTFFPM	NA	NA	NA	N/A	N/A
Wheaton Precious Metals	WPM US EQUITY	WPM	NA	NA	NA	N/A	N/A
<u>Primary Silver Producers</u>				Total cash costs (\$/oz Ag)			
Pan American Silver	PAAS US EQUITY	PAAS	\$11.69	N/A	\$10.69	N/A	9%
<u>Aluminum Producers</u>				C1 Cash Costs (US\$/lb)			
Alcoa	AA US EQUITY	AA	N/A	N/A	N/A	N/A	N/A
<u>Copper Producers</u>				C1 Cash Costs (US\$/lb)			
Freeport	FCX US EQUITY	FCX	\$1.55	\$1.36	\$1.52	14%	2%
Hudbay Minerals	HBM US EQUITY	HBM	\$0.78	\$1.22	\$1.21	-36%	-35%
Teck	TECK US EQUITY	TECK	\$1.11	\$2.41	\$1.79	-54%	-38%
<u>Rare Earth</u>				Production cost of REO (\$/mt)			
MP Materials	MP US EQUITY	MP	\$4,224	N/A	\$5,500	N/A	-23%
<u>Uranium Producer</u>				Cash cost (\$/lb)			
Cameco	CCJ US EQUITY	YCCO	32.13	NA	NA	N/A	N/A
<u>Steel Producers</u>				EBITDA per ton (\$/t)			
Cleveland Cliffs	CLF US EQUITY	CLF	180	N/A	158	N/A	14%
Commercial Metals Co.	CMC US EQUITY	CMC	198	N/A	168	N/A	18%
Nucor Corp.	NUE US EQUITY	NUE	246	N/A	212	N/A	16%
Reliance Steel & Aluminum Co.	RS US EQUITY	RS	N/A	N/A	N/A	N/A	N/A
Steel Dynamics	STLD US EQUITY	STLD	225	N/A	190	N/A	19%
United States Steel Corp.	X US EQUITY	X	160	N/A	127	N/A	26%
<u>Zinc producer</u>				Zinc mining cash cost (\$/t)			
NEXA	NEXA CN EQUITY	NEXA	0.32	N/A	N/A	N/A	N/A

Source: BofA Global Research Estimates, Bloomberg, Visible Alpha

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2024E total capex

Exhibit 11: BofA vs. Bloomberg Consensus and Visible Alpha (VA) – Total Capex

BofA vs. consensus across total capex

Company Name	Bloomberg Ticker	BofA Ticker	2024E Total Capex (\$mn)			BofAe Δ% vs.	
			BofA Estimate	Bloomberg Cons	Visible Alpha	Bloomberg Cons	Visible Alpha
<u>Senior Gold Producers</u>							
Agnico Eagle Mines	AEM US EQUITY	AEM	1,684	1,573	1,562	7%	8%
Barrick Gold	GOLD US EQUITY	GOLD	3,351	2,827	2,971	19%	13%
Kinross Gold	KGC US EQUITY	KGC	975	996	1,005	-2%	-3%
Newmont	NEM US EQUITY	NEM	3,774	3,076	3,316	23%	14%
<u>Mid-Tier Gold Producers</u>							
B2Gold	BTG US EQUITY	BTG	644	612	500	5%	29%
Centerra Gold	CGAU US EQUITY	CGAU	101	115	123	-12%	-18%
Eldorado Gold	EGO US EQUITY	EGO	615	621	643	-1%	-4%
IAMGOLD	IAG US EQUITY	IAG	303	367	363	-17%	-17%
SSR Mining	SSRM US EQUITY	SSRM	254	291	289	-13%	-12%
<u>Intermediate/Jr Golds</u>							
Alamos Gold	AGI US EQUITY	AGI	368	364	N/A	1%	N/A
New Gold	NGD US EQUITY	NGD	297	198	205	50%	45%
<u>Royalty & Streamers</u>							
Franco-Nevada	FNV US EQUITY	FNV	NA	62	11	N/A	N/A
Royal Gold	RGLD US EQUITY	RGLD	NA	2	NA	N/A	N/A
Triple Flag	TFPM CN EQUITY	YTFPM	38	85	62	-56%	-39%
Wheaton Precious Metals	WPM US EQUITY	WPM	NA	713	NA	N/A	N/A
<u>Primary Silver Producers</u>							
Pan American Silver	PAAS US EQUITY	PAAS	407	412	387	-1%	5%
<u>Aluminum Producers</u>							
Alcoa	AA US EQUITY	AA	600	618	657	-3%	-9%
<u>Copper Producers</u>							
Freeport	FCX US EQUITY	FCX	3,890	4,369	4,390	-11%	-11%
Hudbay Minerals	HBM US EQUITY	HBM	389	338	362	15%	7%
Teck	TECK US EQUITY	TECK	3,264	2,819	2,914	16%	12%
<u>Rare Earth</u>							
MP Materials	MP US EQUITY	MP	151	158	172	-4%	-12%
<u>Uranium Producer</u>							
Cameco	CCJ US EQUITY	YCCO	175	170	165	3%	6%
<u>Steel Producers</u>							
Cleveland Cliffs	CLF US EQUITY	CLF	700	722	700	-3%	0%
Commercial Metals Co.	CMC US EQUITY	CMC	575	580	576	-1%	0%
Nucor Corp.	NUE US EQUITY	NUE	3,600	3,277	3,452	10%	4%
Reliance Steel & Aluminum Co.	RS US EQUITY	RS	425	441	415	-4%	2%
Steel Dynamics	STLD US EQUITY	STLD	1,900	1,877	1,879	1%	1%
United States Steel Corp.	X US EQUITY	X	1,502	1,533	1,477	-2%	2%
<u>Zinc producer</u>							
NEXA	NEXA CN EQUITY	NEXA	245	338	270	-28%	25%

Source: BofA Global Research Estimates, Bloomberg, Visible Alpha

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2024E EBITDA

Exhibit 12: BofA vs. Bloomberg Consensus and Visible Alpha (VA) – EBITDA

BofA vs. consensus across EBITDA

Company Name	Bloomberg Ticker	BofA Ticker	BofA Estimate	2024E EBITDA	Visible Alpha	BofAe Δ% vs.	
				Bloomberg Cons		Bloomberg Cons	Visible Alpha
<u>Senior Gold Producers</u>							
Agnico Eagle Mines	AEM US EQUITY	AEM	3,435	3,425	3,467	0%	-1%
Barrick Gold	GOLD US EQUITY	GOLD	6,405	6,265	6,620	2%	-3%
Kinross Gold	KGC US EQUITY	KGC	1,783	1,633	1,685	9%	6%
Newmont	NEM US EQUITY	NEM	5,810	6,568	6,630	-12%	-12%
<u>Mid-Tier Gold Producers</u>							
B2Gold	BTG US EQUITY	BTG	1,056	963	913	10%	16%
Centerra Gold	CGAU US EQUITY	CGAU	319	300	337	6%	-5%
Eldorado Gold	ELD CN EQUITY	EGO	459	521	525	-12%	-13%
IAMGOLD	IAG US EQUITY	IAG	277	442	509	-37%	-46%
SSR Mining	SSRM US EQUITY	SSRM	367	411	387	-11%	-5%
<u>Intermediate/Jr Golds</u>							
Alamos Gold	AGI US EQUITY	AGI	559	553	539	1%	4%
New Gold	NGD US EQUITY	NGD	361	427	457	-15%	-21%
<u>Royalty & Streamers</u>							
Franco-Nevada	FNV US EQUITY	FNV	1,055	1,021	1,023	3%	3%
Royal Gold	RGLD US EQUITY	RGLD	574	573	561	0%	2%
Triple Flag	TFPM CN EQUITY	YTFPM	217	190	182	14%	19%
Wheaton Precious Metals	WPM US EQUITY	WPM	975	954	951	2%	3%
<u>Primary Silver Producers</u>							
Pan American Silver	PAAS US EQUITY	PAAS	842	1,044	917	-19%	-8%
<u>Aluminum Producers</u>							
Alcoa	AA US EQUITY	AA	1,482	1,008	1,110	47%	34%
<u>Copper Producers</u>							
Freeport	FCX US EQUITY	FCX	7,922	9,680	9,985	-18%	-21%
Hudbay Minerals	HBM US EQUITY	HBM	900	924	890	-3%	1%
Teck	TECK US EQUITY	TECK	5,976	7,483	-	-20%	N/A
<u>Rare Earth</u>							
MP Materials	MP US EQUITY	MP	326	178	163	83%	100%
<u>Uranium Producer</u>							
Cameco	CCJ US EQUITY	YCCO	2,415	1,359	1,032	78%	134%
<u>Steel Producers</u>							
Cleveland Cliffs	CLF US EQUITY	CLF	2,916	2,438	2,553	20%	14%
Commercial Metals Co.	CMC US EQUITY	CMC	1,231	1,155	1,035	7%	19%
Nucor Corp.	NUE US EQUITY	NUE	6,836	5,525	5,679	24%	20%
Reliance Steel & Aluminum Co.	RS US EQUITY	RS	1,867	1,726	1,772	8%	5%
Steel Dynamics	STLD US EQUITY	STLD	3,388	2,606	2,877	30%	18%
United States Steel Corp.	X US EQUITY	X	2,423	1,860	2,012	30%	20%
<u>Zinc producer</u>							
NEXA	NEXA CN EQUITY	NEXA	487	490	499	-1%	-2%

Source: BofA Global Research Estimates, Bloomberg, Visible Alpha

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Conference call details

Exhibit 13: Conference Call Details

Conference call details across our coverage universe for Q4'23 reporting.

Ticker	Period	Date	Tzone (ET)	Call Date	Call Time (ET)	Primary Call-In Number	Replay Number
Senior gold producers							
AEM	Q4'23	15-Feb	AMC	16-Feb	11:00 AM	TBA	TBA
KGC	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
NEM	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
GOLD	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
Mid-tier gold producers							
BTG	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
YCG	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
SSRM	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
IAG	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
EGO	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
Intermediate and junior gold producers							
AGI	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
NGD	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
Royalty/streaming companies							
FNV	Q4'23	5-Mar	AMC	6-Mar	TBA	TBA	TBA
YTFPM	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
WPM	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
RGLD	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
Silver producers							
PAAS	Q4'23	21-Feb	AMC	22-Feb	11:00 AM	TBA	TBA
Aluminum producers							
AA	Q4'23	17-Jan	AMC	17-Jan	5:00 PM	TBA	TBA
Copper producers							
FCX	Q4'23	24-Jan	BMO	24-Jan	10:00 AM	www.fcx.com	TBA
YHBM	Q4'23	TBA	TBA	TBA	TBA		
Diversified producers							
TECK	Q4'23	21-Feb	AMC	22-Feb	11:00 AM	TBA	TBA
Zinc producers							
NEXA	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
Uranium Producer							
YCCO	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
Rare earths producers							
MP	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA
Steel							
CMC	Q1'24	8-Jan	BMO	8-Jan	11:00 AM	US 844-861-5503/ CDA 866-605-3852/ INT 412-317-6584 973-528-0011 877-859-6607 / 412-902-1026 pc: 13743711 www.nucor.com	US 877-344-7529/ CDA 855-669-9658/ INT 412-317-6584 919-882-2331 pc: 49627
STLD	Q4'23	23-Jan	AMC	24-Jan	11:00 AM		
CLF	Q4'23	29-Jan	AMC	30-Jan	8:30 AM		
NUE	Q4'23	29-Jan	AMC	30-Jan	10:00 AM		
RS	Q4'23	15-Feb	BMO	15-Feb	11:00 AM	TBA	TBA
X	Q4'23	TBA	TBA	TBA	TBA	TBA	TBA

Source: BofA Global Research, Company Reports

BofA GLOBAL RESEARCH

Exhibit 14: Coverage list with PO's

BofA North American Metals & Mining coverage list

Ticker		Rating		PO	
BofA	BB	(Old)	(New)	(Old)	(New)
Precious Metals					
AEM	AEM US	BUY	BUY	\$66.00	\$66.00
AGI	AGI US	NEUT	NEUT	\$15.75	\$15.75
YBTO	BTO CN	BUY	BUY	\$5.60	\$5.60
CGAU	CGAU US	U/P	U/P	\$5.50	\$5.50
EGO	EGO CN	U/P	U/P	\$10.00	\$10.00
FNW	FNW US	BUY	BUY	\$139.00	\$139.00
GOLD	GOLD US	BUY	BUY	\$20.00	\$20.00
IAG	IAG US	BUY	BUY	\$3.20	\$3.20
KGC	KGC US	U/P	U/P	\$5.25	\$5.25
NEM	NEM US	BUY	BUY	\$48.00	\$48.00
NGD	NGD US	U/P	U/P	\$1.25	\$1.30
PAAS	PAAS US	BUY	BUY	\$18.75	\$18.75
RGLD	RGLD US	U/P	U/P	\$120.00	\$120.00
SSRM	SSRM US	U/P	U/P	\$12.50	\$12.50
TFPM	TFPM US	BUY	BUY	\$17.00	\$17.00
WPM	WPM US	BUY	BUY	\$57.00	\$57.00
Industrial and Base Metals					
AA	AA US	NEUT	NEUT	\$36.00	\$36.00
CCJ	CCJ US	BUY	BUY	\$55.50	\$55.50
FCX	FCX US	NEUT	NEUT	\$40.00	\$44.00
HBM	HBM US	NEUT	NEUT	\$6.25	\$6.25
MP	MP US	BUY	BUY	\$33.00	\$30.00
NEXA	NEXA US	U/P	U/P	\$5.00	\$5.00
TECK	TECK US	BUY	BUY	\$43.00	\$43.00
Steel stocks					
CLF	CLF US	NEUT	NEUT	\$20.00	\$20.00
CMC	CMC US	BUY	BUY	\$55.00	\$55.00
NUE	NUE US	BUY	BUY	\$190.00	\$190.00
RS	RS US	NEUT	NEUT	\$310.00	\$310.00
STLD	STLD US	NEUT	NEUT	\$125.00	\$125.00
X	X US	NO R	NO R		

Source: BofA Global Research

BofA GLOBAL RESEARCH



Price objective basis & risk

Agnico Eagle Mines (AEM)

Our \$66 per share price objective is based on Agnico Eagle trading at 1.75x times our estimated NAV (current net debt position plus a mining asset DCF utilizing a 5% WACC). Historically, North American gold producers have traded between 1 and 2 times NAV, with 1.75-2.0 times being accorded to the organically growth-oriented gold producers such as AEM.

Risks of this price objective not being attained are commodity price weakness, the inability to secure financing for expansion or development projects, unforeseen operating problems, and political risk in the countries the company operates in. Upside risks are commodity price strength, better-than-forecast operating performance and favorable changes in the political environment in the regions where it operates.

Alamos Gold (YAGI / AGI)

Our price objective for Alamos Gold (AGI/YAGI) is US\$15.75/C\$21.75, based on the stock trading at 1.55x our estimated net asset value (NAV). Historically, North American precious metal producers have traded between 1x and 3x NAV, but more recently between 1x and 2x, with unhedged, growth-oriented producers occupying the upper end of the range and Junior and Mid-tier producers trading historically at a discount to the senior producers.

Upside risks to our PO are a higher-than-forecast gold price, a lower-than-forecast CADUSD FX rate, a better-than-expected lower mine tie-in process at Y-D, advantageous changes to the regulatory and/or tax regimes in the jurisdictions in which they operate and the potential for AGI to be acquired at a premium valuation.

Downside risks are a lower-than-forecast gold price and higher-than-forecast CADUSD FX rate, unforeseen operating and development issues.

Alcoa Corporation (AA)

Our price objective of \$36 for AA is based on 4.5x 2024E EV/EBITDA, 3.5x 2025E EV/EBITDA and 1.0x net asset value (NAV), with each value equally weighted. The 4.5x 2024E EV/EBITDA target multiple is below the global aluminum producer peer average around 5x to reflect our view for an extended turn-around to return to higher grade bauxite in Western Australia. The 4.5x is also below AA's historical trading average (since 2016 separation) of 5x. The 3.5x 2025E EV/EBITDA multiple is lower than the 2024E multiple to account for time value and significantly higher aluminum price forecast versus spot. The 1.0x price to NAV (P/NAV) target multiple is in-line with our broad North American metals and mining coverage.

Downside risks to our price objective are: 1) aluminum price weakness, 2) extended delays in getting its bauxite mine approvals in Western Australia, 3) remaining pension liabilities, 4) rising costs for raw materials including electricity, oil, caustic soda, coke, and pitch, 5) power contract negotiation risk (electricity is a large cost component), 6) power disruption risk and other unforeseen weather-related risks, 7) political, regulatory and country risks, 8) unfavorably currencies changes including in the BRL, CAD, EUR, ISK and NOK, and 9) the removal of protective tariffs in key markets.

Upside risks to our price objective are: 1) higher aluminum prices, 2) better-than-expected cost containment, and 3) global demand growth.

B2Gold Corp (YBTO / BTG)

Our price objective for B2Gold (BTG/YBTO) is US\$4.00/C\$5.60 based on the stock trading at 1.25x our estimated net asset value (NAV). Historically, North American precious metal stocks have traded between 1.0x and 3.0x NAV and between 1.0x and 2.0x more recently with a median of 1.25-1.50 times, with unhedged, growth-oriented producers occupying the upper end of the range. We use a 1.35x NAV multiple for BTG vs. mid-tier gold producer peers' target multiples at 0.65x-1.75x due to its superior free cash flow generation, partly offset by low production growth.

While our gold price forecast is a key driver of our rating, it is also a risk to our BTG valuation/forecasts. Other downside risks to our BTG valuation are: 1) political risk from Mali 2) mine plan estimates in excess of BTG reserves, 3) lack of commodity diversification, 4) mine plans that are based on outstanding permits or approvals, 5) unfavorable changes in currencies, 6) unforeseen increases in input costs such as the price of oil and labor and 7) the possibility it could lose its social license to operate at any of its mines or projects. Upside risks are a higher gold price, the possibility for BTG to be acquired and unexpected exploration success.

Barrick Gold (GOLD)

Our price objective (PO) for Barrick Gold is \$20.00 per share and is based on the stock trading at 1.00 times our estimated net asset value (NAV). Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with unhedged, growth-oriented producers with assets located in relatively geopolitically stable regions occupying the upper end of the range. Preventing us from assigning a higher target P/NAV multiple is Barrick's stable gold output. Downside risks to our price objective are: commodity price weakness, the inability to secure financing for expansion or development projects, unforeseen operating problems, political or legal challenges in the regions in which the company operates, rising capital and operating costs and delays in the development of its growth projects.

Cameco Corporation (YCCO / CCJ)

Our US\$55.50 (C\$76) PO is based on 1.0x our NAV, and 13.5x 2024E & 13x 2025E EV/EBITDA (all three equally weighted). We use a CADUSD FX rate of 1.37. The 1.0x P/NAV is above the longer term avg around 0.9x but below peak of 1.35x. We think 1.0x is justified given Cameco's world-class tier one assets in favorable jurisdictions (Canada) partially offset by the fact one of those tier-one assets has been voluntarily idled (but is in the process of restarting).

Downside risks: 1) slower-than-expected global energy demand growth, 2) continued push-out of a Japanese nuclear fleet restart, 3) any worsening in sentiment toward nuclear or more favorable sentiment toward alternative power fuel sources, and 4) any production problems at Cameco's only operating mine, Cigar Lake. Upside risks: 1) additional potential mine disruptions that may further improve supply-demand dynamics, 2) better pace of reactor development in key future demand countries (China, Japan, and India), 3) more stringent carbon emissions restrictions in key countries, encouraging nuclear power as an environmentally friendly base line energy source, 4) a material rise in NatGas prices making nuclear power generation competitive in the US.

Centerra Gold (YCG / CGAU)

Our price objective for Centerra Gold is C\$7.55 per share and US\$5.50 per share, based on the stock trading at 0.55x our estimated net asset value (NAV). Historically North American precious metal stocks have traded between 1 and 3 times NAV, with a median of 1.50 times over the past nine years (and 2.00 times longer-term), with unhedged, growth-oriented producers occupying the upper end of the range.

Downside risks to our price objective for Centerra Gold are commodity price weakness, delays in the development of its growth projects and the potential for additional operating issues at Öksüt. Upside risks to our price objective are gold and molybdenum

prices rising, unexpected exploration success at any of the assets, a favorable renegotiation of its gold/copper stream on Mt. Milligan.

Cleveland-Cliffs (CLF)

Our \$20.0 PO is based on 5.5x 2024E EV/EBITDA, 5.0x 2025E EV/EBITDA and 1.0x net asset value, with each value equally weighted. The 5.5x 2024E EV/EBITDA target multiple is below its historical trading average of 7.0x and sector average of 6.7x due to its higher leverage and above normal near-term steel price forecasts. The 5.5x multiple is also below the target multiple used for mini-mill peers to account for CLF's higher (fixed) cost structure, partly offset by a better product mix and reduced realized pricing volatility due to its exposure to higher margin fixed price automotive contracts.

Downside risks: 1) new capacities pressuring steel prices & margins, 2) obsolescence of its capacity relative to newer supply forcing closures, 3) higher-than-expected capex or interrupted operations to address older mills or environmental liabilities, 4) union representation may keep labor costs high relative to peers, 5) underfunded pension/health care position & high leverage, 6) risks to auto sector demand, including switching to aluminum & alternative materials, 7) higher imports and/or, 8) changes to trade policy.

Upside risks: 1) better steel demand than we anticipate, 2) steel price outperformance, especially if driven by raw materials as CLF is largely vertically integrated, 3) Further reduction in underfunded pension & OPEB liability, 4) resumption of the dividend, 5) better auto negotiating position for longer, and 6) sustained/higher barriers to imported steel.

Commercial Metals (CMC)

Our \$55 per share price objective for Commercial Metals (CMC) is based on a blended 6.0x FY24E EV/EBITDA, 5.5x FY25E EV/EBITDA and 1.0x our NAV. The 6.0x 2023E EV/EBITDA target multiple is in-line its historical trading average. The 6.0x multiple is below the sector average multiple of 6.7x and the target multiples used for mini-mill peers (6.5-7.0x for STLD/NUE) given its lack of product / end-market diversification. This is partly offset by CMC's leverage to infrastructure demand, which is set to see strong growth from significant increase in federal spending (management forecasts around 1.5mn ton per annum of incremental demand against a 9-10mn U.S. rebar market).

Upside risks to our price objective are: 1) better-than-expected construction / reshoring demand, 2) higher steel pricing, 3) better-than-expected pricing power in global long products that support pricing and limit imports, 4) additional trade relief, 5) cash deployment for organic or inorganic growth.

Downside risks to our price objective are: 1) sluggish demand due to delay in federal funding and/or tightened credit availability for private projects, 2) lower steel pricing, 3) execution risk related to Tensar and new micro-mills, 4) any rollback of trade relief, particularly related to Section 232, 5) threat of lower priced imports and 6) potential medium term oversupply from various new entrants in the domestic rebar market.

Eldorado Gold (EGO / YELD)

Our price objective for Eldorado Gold is \$10.00 (C\$13.70) per share, and is based on the stock trading at 0.70x times its estimated net asset value (NAV). Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with a median of 1.50 times over the last five years (and 2.00 times longer-term), and with unhedged, growth-oriented producers occupying the upper end of the range. We value EGO at the lower end of the valuation range due to higher political risk for operating in Greece and Türkiye. Historically, EGO has traded at a P/NAV of approximately 0.7x.

Risks to our price objective for Eldorado Gold are commodity price weakness, the inability to secure financing for expansion or development projects, unforeseen operating problems, political, legal or permitting challenges in the regions in which the company operates, rising capital and operating costs and delays in the development of its growth projects. Upside risks are a higher than expected gold price, a more hospitable regulatory environment in the jurisdictions in which Eldorado operates (in particular, Greece), more favorable than forecast foreign exchange rates, and better than expected operational results.

Franco-Nevada (YFNV / FNV)

Our price objective for Franco-Nevada is C\$190 (US\$139) per share, and is based on the stock trading at 2.50 times our estimated net asset value (NAV) on a cash-adjusted basis and a USD/CAD FX rate of 1.37x. Historically, North American precious metal streaming stocks have traded between 1.50 and 3.50 times NAV, with growth oriented streaming companies at the top end. Based on its strong balance sheet and low-cost asset base, we believe Franco-Nevada deserves a premium multiple. Franco-Nevada also benefits from an experienced management team. Risks to our price objective for Franco-Nevada are commodity price weakness and unforeseen operating problems at the mines on which its royalties are based..

Freeport-McMoRan (FCX)

Our \$44.00-per-share price objective blends 9.0x 2024E, 8.5x 2025E EV/EBITDA and 1.0x our net asset value (NAV). The 9.0x EV/EBITDA target multiple is at the higher end of the range for copper producers covered by BofA. We think this is appropriate given stable production profile, low unit costs and a improving balance sheet. At 8.5x, 2025 is still elevated despite time-related uncertainty. Our P/NAV multiple of 1.0x is in line with most of the copper producers covered by BofA but is arguably conservative given several potentially value enhancing growth options that we do not currently model. These include a new mill at El Abra, a mill expansion at Bagdad, and low-grade leaching.

Downside risks to our price objective are 1) global economic weakness, 2) Operating disruptions, 3) execution risk at its cost-cutting or expansion programs, 4) stricter or unfavorable regulatory or environmental regulations, particularly at its Indonesian operations, 5) other factors pressuring prices of the commodities it produces, and 6) unfavorable currency moves.

Upside risks are 1) better-than-expected copper and gold prices, 2) a more accommodating operating environment in Indonesia, and 3) further cost-cutting progress.

Hudbay Minerals (YHBM / HBM)

Our C\$8.50 (US\$6.25) per share price objective for Hudbay Minerals (YHBM/HBM) is based on a 3.5x 2024E EV/EBITDA multiple, 3.0x 2025E EV/EBITDA multiple and 1.0x our net asset (NAV) estimate, weighted equally to each. Since 2005, the global copper producers have traded in an EV/EBITDA range from 2.0x to 13.0x with HBM trading at a discount. For HBM, we use a lower-of-the-range target multiple given our neutral/cautious outlook for copper in the near term, as well as an unclear medium to longer-term volume growth outlook.

Upside risks are stronger than forecast copper prices, favorable local currency changes that lower USD costs, the receipt of all permits for Rosemont with no legal challenges, a sooner than expected start of mining of the Pampacancha satellite deposit and the potential for HBM to be targeted for acquisition.

A downside risk to our PO is a weaker-than-expected global economy that could impede metal demand growth expectations, affecting our commodity price forecasts. Other downside risks are a delay in attaining surface access rights at Pampacancha, the

political and regulatory climate in the jurisdictions in which HBM operates (Canada, Peru and the USA), stronger than forecast local currencies that increase USD costs, increases in general operating and development costs, labor action, weather and the inability to attain the needed permits to develop Rosemont, M&A risk.

IAMGOLD Corp. (IAG / YIMG)

Our price objective for IAMGOLD is US\$3.20/C\$4.40 per share, and is based on the stock trading at 0.65x times our estimated net asset value (NAV) and a 1.37 CADUSD exchange rate. Historically, North American precious metal stocks have traded between 0.50 and 3 times NAV, with a median of 2.00 times over the long-term, and with unhedged, growth-oriented producers with solid financial positions and low relative costs and located in stable mining jurisdiction occupying the upper end of the range. We ascribe a low P/NAV multiple to IAMGOLD to reflect our forecast for higher than average political risk in Burkina Faso, execution risks at the Cote Gold project, and higher cash costs and debt vs. peers. As the Cote Gold project in Canada ramp-ups through 2024 and 2025, this should drive strong volume growth, lower costs and political risk, and ultimately drive deleveraging.

Kinross Gold (KGC)

Our price objective for Kinross Gold is \$5.25 per share, and is based on the stock trading at 1.00 times our net asset value (NAV) estimate, reflecting production growth that is forecast to be slightly lower than the senior/mid-tier average. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with companies with declining production at the lower end of the range.

Risks to our price objective for Kinross Gold are commodity price weakness, the inability to secure financing for expansion or development projects, unforeseen operating problems, political or legal challenges in the regions in which the company operates, rising capital and operating costs and delays in the development of its growth projects or current mine expansions. There is also a risk that the Great Bear deal is not completed. On the upside, risks are stronger than expected commodity prices and an operating turnaround that exceeds our expectations in terms of timing and magnitude.

MP Materials (MP)

Our \$30 PO assumes a 15x multiple on our 2024E EBITDA. The 15x multiple assigned is at a discount to its own historical average of 17x to account for our higher (vs. spot) NdPr price forecast of \$110/kg. Our 15x target multiple for MP compares to 14x target multiple used to value Lynas (LYC), its closest peer. We include no value for the Stage III expansion into high-end NdFeB sintered magnet production which represents upside to our estimates. The higher multiple to LYC reflects this yet to be modeled upside.

Upside risks: 1) stronger EV and wind generation demand, 2) scarcity of other rare earths investment vehicles, 3) likely first-mover advantage in the vertical integration opportunity, 4) barriers to entry (Stage I and II), 5) potential for U.S. government financial support, 6) possible collaborations with major EV makers, 7) the possibility that MP could be acquired, 8) higher than expected rare earths pricing and 9) difficulty in determining market prices for MP's concentrate given its uniqueness.

Downside risks: 1) execution of Stage II and cost containment, 2) much higher China supply quotas, 3) new entrants, particularly outside of China, 4) others beating them to Stage III (competition), 5) limited clarity on Stage III profitability, 6) rare earth magnet substitutes, 7) slower EV adoption hurting demand, 8) Shenghe Resources as the sole buyer of concentrate, and 9) difficulty in determining market prices for MP's concentrate given its uniqueness.

New Gold Inc. (YNGD / NGD)

Our price objective for New Gold of US\$1.30/C\$1.80 per share is based on the shares trading at 0.60x its estimated net asset value (NAV) appropriately reflecting our outlook for the company relative to its peers, in our view. Historically, North American precious metal stocks have traded between 0.75x and 3.0x NAV, with a median of 1.50 times in the past three years (and 2.00 times longer term), with unhedged, growth-oriented producers occupying the upper end of the range, and companies with operating and/or financial issues at the lower end. Upside risks to our price objective are better-than-expected co-product basis cost control, and higher than expected commodity prices. Downside risks are operations get worse than expected, NGD has issues refinancing its debt, gold and copper prices go down.

Newmont Corporation (NEM / XNCRF)

Our price objective for Newmont is \$48.00 (A\$73.00) per share, and is based on the stock trading at 1.25 times our estimated net asset value (NAV). We assume a USDAUD exchange rate of 0.66. Our NAV is based on a 5 percent discount rate and a long-term gold price of \$1,800/oz. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with a median of 1.50 times over the past three years (2.00 times longer-term), and with unhedged, growth-oriented producers with solid balance sheets occupying the upper end of the range. In the great gold rally of 2011, NEM's multiple peaked at 2.50x. Upside risks to our price objective are stronger-than-forecast commodity prices, better than expected success at reducing costs and positive regulatory, permitting or operating developments. Downside risks to our price objective for Newmont are the inability to secure financing for expansion or development projects, unforeseen operating problems, political, legal or permitting challenges in the regions in which the company operates, rising capital and operating costs and delays in the development of its growth projects.

Nexa Resources (NEXA)

Our US\$5.00 per share price objective is based on 4.0x 2024E and 3.5x 2025E EV/EBITDA and 1.00x our net asset value (NAV). Our EBITDA multiples are at a discount to the peer median. This is in line to the historic discount. Reasons for the historic discount are a dominant majority shareholder (at >50% of the outstanding shares), relatively lower share liquidity, a preference among investors for metals other than zinc, and poor execution on the mine plans.

Upside risks to our price objective are: 1) higher than expected zinc prices, 2) better than expected cost containment, 3) stronger than expected global demand growth, but particularly China, 4) greater than expected challenges at other competitors looking to lift their mining production, and 5) a turn-around at underperforming assets.

Downside risks to our price objective are: 1) zinc price weakness, 2) global economic weakness, but particularly China, 3) Chinese and other mine restarts oversupplying global markets, 4) a stronger U.S. dollar tends to weigh on commodity prices, 5) unplanned operating disruptions at Nexa, 6) stricter mining regulations or higher taxes in Peru or Brazil, 7) parent Votorantim holds 64.7% of Nexa shares and retains voting control thus reducing the likelihood of Nexa being acquired, and 8) unreported zinc inventories that unexpectedly become available to the market.

Nucor (NUE)

Our price objective of \$190 per share is based on 7.0x 2024E EV/EBITDA, 6.5x 2025E EV/EBITDA and 1.0x NAV, with each value equally weighted. The 7.0x 2024E EV/EBITDA target multiple is largely in line to the 7.1x historical and sector average of 6.7x given the higher than normal near term price forecasts partly offset by its operating leverage to near-term volume recovery and exposure to long/plate markets. The 7.0x multiple is above the target multiple used for integrated peers (5.5x for CLF) to recognize its highly variable cost structure, diversified product mix, strong volume growth potential (from multiple projects underway) and investment grade balance sheet with a disciplined

capital return policy (minimum of 40% of net income).

Downside risks to our price objective are: 1) lower steel price and higher scrap costs squeezing margins, 2) weaker than expected demand especially in construction markets, 3) project start-up delays and cost overruns, and 4) M&A's which could be dilutive in the near-term.

Upside risks to our price objective are: 1) higher than expected steel prices, 2) lower than expected input costs, 3) lower import volumes, 4) more favorable trade policies, and 5) a stronger than expected economy.

Pan American Silver (PAAS)

Our price objective for Pan American Silver is \$18.75, and is based on the stock trading at 1.25x our estimated net asset value (NAV) on a net investments-adjusted basis (i.e. the 1.25x multiple is applied to the asset value and then the value of the equity investments is added to that with an effective 1.0x multiple applied). Our NAV is based on a 5% discount rate for all assets, except Escobal for which we use 7.5%. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with silver producers generally trading at a discount to gold producers.

Upside risks to our price objective are higher than expected commodity price forecasts, a change in the regulatory/permitting environment in the Chubut province of Argentina where Pan American's dormant Navidad project is located, operating results that exceed expectations and lower than expected capital costs. Downside risks to our price objective are unforeseen operating issues, realized commodity prices that are below our forecast, regulatory issues (including tax, environmental and permitting) that cause financial results to differ from our forecast, and higher than expected capital costs.

Reliance Steel & Aluminum (RS)

Our \$310 per share price objective for Reliance Steel & Aluminum (RS) is based on 9.5x 2024E EV/EBITDA, 9.0x 2025E EV/EBITDA and 1.0x NAV, with each value equally weighted. The 9.5x 2024E EV/EBITDA target multiple is above its historical trading average of 7.4x to account for improved business model with higher sustainable gross profit margin of 29-31% versus 25-27% in 2015/16 and potential growth through M&As. The 9.5x multiple is more in-line with traditional industrial distributors and higher than the sector average of 6.7x as Service Centers merit a higher through-the-cycle multiple compared to steel mills, in our view, because of the countercyclical nature of free cash flows, generally more stable earnings, and less capital-intensive businesses.

Downside risks to our price objective are: 1) a sharp correction in prices (carbon steel, stainless and aluminum), 2) weaker than expected macro, leading to lower metal demand, 3) higher imports and 4) execution risk related its acquisition strategy.

Upside risks to our price objective are: 1) aggressive buybacks or dividend increases, 2) higher metal prices, 3) more attractive consolidation opportunities and 4) a better demand environment.

Royal Gold (RGLD)

Our price objective for Royal Gold is \$120 per share, which is based on the stock trading at 2.00 times our adjusted net asset value (NAV), valuing net cash cost 1:1. Our net asset value (NAV) is based on a 5% discount rate. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with unhedged, growth-oriented producers occupying the upper end of the range. Given Royal Gold's status as a royalty company as opposed to an operator, our target valuation multiple reflects its good cash flow-generating ability.

Upside risks to our PO are substantially higher commodity prices, higher-than-expected

output at the royalty assets, and/or higher reserves at the royalty assets. Downside risks are a weaker gold price, problems at the operations, and no exploration success.

SSR Mining Inc. (SSRM / YSSRM)

Our price objective for SSR Mining is \$12.50 (C\$17.25) per share, and is based on 1.00x our adjusted estimated net asset value (NAV). Our NAV is based on a 5% discount rate (consistent with the vast majority of gold operations within our North American precious metals coverage) and 10-year average gold price forecast of \$1,869 per ounce.

Historically, North American precious metal stocks have traded between 1 and 3x NAV, with a median of 1.00x over the past three years (2.00x longer-term). Our target multiple is in line with solid free cash flow generation. Upside risks to our price objective are stronger than forecast commodity prices, better than expected success at reducing costs and positive regulatory, permitting or operating developments. Downside risks to our price objective for SSR are the inability to secure financing for expansion or development projects, unforeseen operating problems, political, legal or permitting challenges in the regions in which the company operates, rising capital and operating costs and delays in the development of its growth projects.

Steel Dynamics (STLD)

Our \$125 per share price objective for Steel Dynamics (STLD) is based on 6.5x 2024E EV/EBITDA, 6.0x 2025E EV/EBITDA and 1.0x NAV, with each value equally weighted. Our 6.5x target EV/EBITDA multiple is largely in-line the 6.3x historical avg to recognize its industry leading utilization rate, highly variable cost structure, leading value-add product portfolio, strong volume growth from Sinton and investment grade balance sheet partly offset by the higher than normal near term sheet price forecasts and profitability of its Fabrication segment.

Upside risks to our price objective are: better than expected macro leading to stronger steel pricing and spreads than we forecast, continued Fabrication tailwind, aggressive shareholder returns, more protective trade policy, and lower imports.

Downside risks to our price objective are: lower steel and metal spreads, project delays, lower than expected demand, higher imports, and excess industry supply.

Teck Resources (YTECK / TECK)

We set our price objective (PO) for TECK at \$43 per share (C\$59 per share). This is based on 6.5x 2024E EBITDA, 6.0x 2025E EV/EBITDA and 1.0x NAV for the base metals business, plus 1x cash price offered for the Elk Valley Resources segment by Glencore. The 6.5x EV/EBITDA target multiple is near the middle of the range of 4.0-9.0x used to value the copper producers, and in line to the copper producer median target EV/EBITDA multiple of around 6.5x. The lower than median target multiple is to reflect execution issues at its QB2 copper project in Chile, and some conservatism. Given TECK's copper volume growth, it's suite of additional organic copper production growth options, and relatively attractive jurisdictional exposure, the market could assign a higher multiple to the base metal business. We assume CADUSD = 1.37.

Downside risks to our price objective are: 1) global economic weakness, specifically in China and India, 2) excess supply given China's position and recent elevated prices, 3) unplanned Teck operating disruptions, 4) stricter regulatory or environmental measures, 5) other factors pressuring prices of the commodities it produces.

Upside risks to our price objective are: the potential to monetize its copper projects, especially if copper prices exceed our expectations, and potentially greater success in its cost-savings/efficiency initiatives.

Triple Flag Precious Metals Corp. (YTFPM / TFPM)



Our C\$23.25 (\$17.00) per share PO for TFPM is based on a target valuation multiple of 1.75x our estimated NAV. The multiple is a slight discount to the senior royalty & streaming peers giving consideration to TFPM's smaller market cap and liquidity, and less diversification by geography, commodity and operator, partly offset by above average margins and attributable GEO production growth. The multiple is at the high end of the range for the gold producer peers given the attractive relative investment characteristics of the royalty & streaming business model (precious metals exposure with insulation from opex and capex inflation and upside from production growth and exploration success).

Our NAV estimate is based on a 5% real discount rate and ten-year average real gold and silver prices of \$1,779/oz and \$23.31/oz with long-term prices of \$1,800/oz and \$25.00/oz (starting in 2028E).

Downside risks to our PO are: 1) a lack of input the operation of portfolio assets, 2) competition from a growing royalty and streaming sector 3) precious metal price volatility, 4) asset investments in non-investment grade emerging markets, 5) concentrated ownership structure, 6) ramp up issues at the Gunnison and Pumpkin Hollow mines.

Upside risks are: 1) higher than expected gold and silver prices, 2) future exploration discoveries and unexpected expansions at mines in the portfolio, 3) a potential acquisition of TFPM.

United States Steel Corporation (X)

We have removed the investment opinion on the company's stock. Investors should no longer rely on our previous opinion or price objective.

Wheaton Precious Metals (WPM)

Our price objective for Wheaton is \$57.00 per share, and is based on the stock trading at 2.50x times our estimated net asset value (NAV). Our NAV per share is based on a 5 percent discount rate. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with a median of 2.00 times longer-term (1.50 times in the last three years), and with royalty/streaming companies occupying the upper end of the range.

Risks to our price objective for Wheaton are continued commodity price weakness, unforeseen operating problems at the mines on which its silver streams are based, financing challenges, political or legal challenges in the regions in which the mines operate, and delays in the development of projects for which the company silver streams.

Analyst Certification

We, Lawson Winder, CFA and Harmen Puri, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

North America - Metals and Mining Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Agnico Eagle Mines	AEM	AEM US	Lawson Winder, CFA
	B2Gold Corp	YBTO	BTO CN	Harmen Puri
	B2Gold Corp	BTG	BTG US	Harmen Puri
	Barrick Gold	GOLD	GOLD US	Lawson Winder, CFA
	Cameco Corporation	YCCO	CCO CN	Lawson Winder, CFA
	Cameco Corporation	CCJ	CCJ US	Lawson Winder, CFA
	Commercial Metals	CMC	CMC US	Lawson Winder, CFA
	Endeavour Mining	YEDV	EDV CN	Harmen Puri
	Endeavour Mining	EDVMF	EDVMF US	Harmen Puri
	Endeavour Mining PLC	XEDVF	EDV LN	Harmen Puri
	Franco-Nevada	YFNV	FNV CN	Lawson Winder, CFA
	Franco-Nevada	FNV	FNV US	Lawson Winder, CFA
	IAMGOLD	YIMG	IMG CN	Lawson Winder, CFA
	IAMGOLD Corp.	IAG	IAG US	Lawson Winder, CFA
	Ivanhoe Mines	YIVN	IVN CN	Lawson Winder, CFA
	Ivanhoe Mines	IVPAF	IVPAF US	Lawson Winder, CFA
	Lundin Mining	XLPRF	LUMI SS	Lawson Winder, CFA
	Lundin Mining Corp	YLUN	LUN CN	Lawson Winder, CFA
	Lundin Mining Corp	LUNMF	LUNMF US	Lawson Winder, CFA
	MP Materials	MP	MP US	Lawson Winder, CFA
	Newmont Corporation	NEM	NEM US	Lawson Winder, CFA
	Newmont Corporation	XNCRF	NEM AU	Lawson Winder, CFA
	Nucor	NUE	NUE US	Lawson Winder, CFA
	Pan American Silver	PAAS	PAAS US	Lawson Winder, CFA
	Teck Resources	YTECK	TECK/B CN	Lawson Winder, CFA
	Teck Resources Ltd	TECK	TECK US	Lawson Winder, CFA
	Triple Flag Precious Metals Corp.	YTFPM	TFPM CN	Lawson Winder, CFA
	Triple Flag Precious Metals Corp.	TFPM	TFPM US	Lawson Winder, CFA
	Wheaton Precious Metals	WPM	WPM US	Lawson Winder, CFA
NEUTRAL				
	Alamos Gold	YAGI	AGI CN	Harmen Puri
	Alamos Gold	AGI	AGI US	Harmen Puri
	Alcoa Corporation	AA	AA US	Lawson Winder, CFA
	Cleveland-Cliffs	CLF	CLF US	Lawson Winder, CFA
	First Quantum	FQVLF	FQVLF US	Lawson Winder, CFA
	First Quantum Minerals	YFM	FM CN	Lawson Winder, CFA
	Freeport-McMoRan	FCX	FCX US	Lawson Winder, CFA
	Hudbay Minerals	YHBM	HBM CN	Lawson Winder, CFA
	HudBay Minerals	HBM	HBM US	Lawson Winder, CFA
	Reliance Steel & Aluminum	RS	RS US	Lawson Winder, CFA
	Steel Dynamics	STLD	STLD US	Lawson Winder, CFA
UNDERPERFORM				
	Centerra Gold	YCG	CG CN	Lawson Winder, CFA
	Centerra Gold	CGAU	CGAU US	Lawson Winder, CFA
	Eldorado Gold	EGO	EGO US	Harmen Puri
	Eldorado Gold	YELD	ELD CN	Harmen Puri
	Kinross Gold	KGC	KGC US	Lawson Winder, CFA
	New Gold Inc.	YNGD	NGD CN	Harmen Puri
	New Gold Inc.	NGD	NGD US	Harmen Puri
	Nexa Resources	NEXA	NEXA US	Lawson Winder, CFA
	Royal Gold	RGLD	RGLD US	Lawson Winder, CFA
	SSR Mining Inc.	SSRM	SSRM US	Lawson Winder, CFA
	SSR Mining Inc.	YSSRM	SSRM CN	Lawson Winder, CFA

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Non-Ferrous Metals/Mining & Minerals Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	58	53.70%	Buy	26	44.83%
Hold	24	22.22%	Hold	10	41.67%
Sell	26	24.07%	Sell	13	50.00%

Equity Investment Rating Distribution: Steel Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	14	43.75%	Buy	9	64.29%
Hold	12	37.50%	Hold	7	58.33%
Sell	6	18.75%	Sell	3	50.00%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. **Coverage Cluster** is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Agnico Eagle, Alamos Gold, Alcoa, B2Gold, Barrick Gold, Cameco Corp., Centerra Gold, Cleveland-Cliffs, Commercial Metals, Eldorado Gold, Franco-Nevada, Freeport-McMoRan, HudBay Minerals, IAMGOLD, Kinross Gold, MP Materials, New Gold Inc., Newmont, Nexa Resources, Nucor, Pan American, Reliance Steel & Al, Royal Gold Inc, SSR Mining Inc., Steel Dynamics, Teck Resources Ltd, Triple Flag, US Steel, Wheaton Precious.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Cleveland-Cliffs, Kinross Gold.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Agnico-Eagle, Alcoa Corp., Barrick Gold, Cleveland-Cliffs, Eldorado Gold, Freeport-McMoRan Inc, HudBay Minerals, Kinross Gold, Newmont, Nexa Resources, Nucor, Pan American, Reliance Steel & Al, Royal Gold Inc, Steel Dynamics, Teck Resources, US Steel, Wheaton Precious.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Agnico-Eagle, Alcoa Corp., Barrick Gold, Cleveland-Cliffs, Commercial Metals, Eldorado Gold, Franco-Nevada, Freeport-McMoRan Inc, Kinross Gold, New Gold Inc., Newmont, Nexa Resources, Nucor, Pan American, Reliance Steel & Al, Royal Gold Inc, SSR Mining Inc, Steel Dynamics, Teck Resources, Triple Flag Precious, US Steel, Wheaton Precious.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Agnico-Eagle, Alcoa Corp., Barrick Gold, Cameco Corporation, Cleveland-Cliffs, Commercial Metals, Eldorado Gold, Franco-Nevada, Freeport-McMoRan Inc, Kinross Gold, New Gold Inc., Newmont, Nexa Resources, Nucor, Pan American, Reliance Steel & Al, Royal Gold Inc, SSR Mining Inc, Steel Dynamics, Teck Resources, Triple Flag Precious, US Steel, Wheaton Precious.

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