

Strategic Metals & Rare Earths Letter

INTERNATIONAL

the independent information and advisory publication on investing in Strategic Metals & Rare Earths

June 2021



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publisher and editor

Critical Metals and Special Minerals		Heavy Rare Earths Oxides (HREO)		Light Rare Earth Oxides (LREO)
lithium (Li)	yttrium (Y)	europium (Eu)	erbium (Er)	lanthanum (La)
cobalt (Co)	scandium (Sc)	gadolinium (Gd)	thulium (Tm)	cerium (Ce)
graphite (C)	niobium (Nb)	terbium (Tb)	ytterbium (Yb)	praseodymium (Pr)
vanadium (V)	tantalum (Ta)	dysprosium (Dy)	lutetium (Lu)	neodymium (Nd)
magnesium (Mg)	beryllium (Be)	holmium (Ho)		promethium (Pm)
tungsten (W)	gallium (Ga)			samarium (Sm)
titanium (Ti)	indium (In)			
zirconium (Zr)	germanium (Ge)			
hafnium (Hf)				
antimony (Sb)				

► EV revolution offers unmatched investment opportunities in crucial metals equity markets

Overview of listed LITHIUM focused companies (by market capitalization)

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization	
			July 1 2021	year-end 2020		H	L	US\$ billion	US\$ billion
			US\$	US\$		US\$	US\$	US\$ billion	US\$ billion
Albemarle Corp.	NYSE	ALB	172.03	147.52	17	188.36	74.78	20.1	20.1
FMC	NYSE	FMC	108.54	114.93	-6	123.66	96.05	14.0	14.0
SQM	NYSE	SQM	47.40	49.09	-3	60.74	25.84	12.5	12.5
			Euro	Euro		Euro	Euro	Euro million	US\$ million
ERAMET	Euronext	ERA:FP	56.65	42.92	32	69.55	20.05	1,494.0	1,778
			CNY	CNY		CNY	CNY	CNY billion	US\$ billion
Tianqi Lithium	Shenzen	002466	63.60	39.27	62	70.13	18.69	98.1	14.7
			A\$	A\$		A\$	A\$	A\$ million	US\$ million
Pilbara Minerals	1) ASX	PLS	1.46	0.87	68	1.60	0.24	4,210.0	3,157.5
Orocobre	ASX	ORE	6.44	4.51	43	7.28	2.35	2,210.0	1,657.5
Galaxy Resources	ASX	GXY	3.69	2.31	60	4.17	0.78	1,860.0	1,395.0
Piedmont Lithium	ASX	PLL	1.05	0.37	184	1.14	0.08	1,640.0	1,230.0
Liontown Resources	ASX	LTR	0.81	0.40	105	0.89	0.11	1,470.0	1,102.5
IoNeer	ASX	INR	0.33	0.28	20	0.49	0.09	625.9	469.4
AVZ Minerals	ASX	AVZ	0.16	0.17	-6	0.23	0.05	465.0	348.7
Sayona Mining	2) ASX	SYA	0.08	0.01	789	0.09	0.01	422.6	317.0
Neometals	ASX	NMT	0.52	0.28	84	0.59	0.14	280.9	210.6
Core Lithium	ASX	CXO	0.24	0.15	62	0.42	0.04	275.9	206.9
Argosy Minerals	ASX	AGY	0.10	0.08	25	0.22	0.05	125.0	93.8
Lithium Australia	ASX	LIT	0.11	0.07	67	0.21	0.05	99.7	74.8
Prospect Resources	ASX	PSC	0.23	0.17	32	0.28	0.06	84.0	63.0
Lithium Power International	ASX	LPI	0.20	0.22	-11	0.39	0.145	58.7	44.0
European Lithium	ASX	EUR	0.06	0.05	22	0.13	0.04	51.4	38.5

1) completed acquisition of Altura Lithium on January 20, 2021; in consideration of an upfront cash payment of US\$ 155 million (A\$ 201 million)

2) superior Court of Quebec approves acquisition of North American Lithium to create world-scale Abitibi lithium hub

Overview of listed LITHIUM focused companies (by market capitalization) - *continuation*

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization	
			July 1 2021	year-end 2020		H	L	C\$ million	US\$ million
	C\$	C\$	C\$	C\$	C\$ million	US\$ million			
Lithium Americas	TSX	LAC	18.42	15.98	15	36.60	6.30	2,207.9	1,788.4
Standard Lithium	TSX.V	SLL	5.09	2.85	79	5.24	0.97	718.0	581.6
Sigma Lithium Resources	TSX.V	SGMA	6.65	2.99	122	7.05	1.56	581.0	470.6
Neo Lithium	TSX	NLC	2.89	1.99	45	3.88	0.46	408.5	330.9
American Lithium	TSX.V	LI	1.85	1.22	52	4.21	0.81	326.9	264.8
Millennial Lithium	TSX	ML	2.80	2.57	9	5.25	0.97	273.9	221.8
Critical Elements Lithium	TSX.V	CRE	1.31	0.69	90	1.79	0.28	240.1	194.5
Frontier Lithium	TSX.V	FL	0.78	0.37	114	1.39	0.19	152.1	123.2
E3 Metals	TSX.V	ETMC	1.87	0.88	113	5.37	0.26	99.1	80.2
Wealth Minerals	TSX.V	WML	0.35	0.09	312	0.45	0.07	79.5	64.4
Macarthur Minerals	TSX.V	MMS	0.43	0.44	-2	0.70	0.15	60.5	49.0
Avalon Advanced Materials	TSX	AVL	0.16	0.11	41	0.36	0.05	55.8	45.2
Pure Energy Minerals	TSX	PE	1.32	0.71	86	2.63	0.48	43.3	35.1
Aberdeen International	TSX	AAB	0.29	0.15	97	0.48	0.04	39.1	31.6
Lithium South Development	1) TSX.V	LIS	0.43	0.46	-5	1.18	0.21	25.4	20.5
Ultra Resources	2) TSX.V	ULT	0.22	0.09	139	0.28	0.04	23.1	18.7
Power Metals	TSX.V	PWM	0.22	0.39	-45	0.47	0.20	22.7	18.4
Dajin Lithium	3) TSX.V	DJI	0.07	0.06	17	0.20	0.04	11.4	9.2
Portofino Resources	TSX.V	POR	0.09	0.10	-10	0.26	0.09	7.4	6.0
Argentina Lithium and Energy	TSX	LIT	0.20	0.09	122	0.26	0.05	7.1	5.7
			GBP	GBP		GBP		£ million	US\$ million
Bacanora Lithium	4) AIM	BCN	58.80	63.00	-7	69.00	20.05	225.9	311.7
European Metals Holdings	AIM	EMH	84.00	64.00	31	102.50	14.50	147.1	203.0
Kodal Minerals	5) AIM	KOD	0.47	0.10	370	0.50	0.04	73.7	101.7
Savanna Resources	AIM	SAV	3.85	4.40	-13	5.97	1.79	65.0	89.7

1) name change from NRG Metals effective October 19, 2020

2) also gold assets in Australia

3) name change from Dajin Resources effective January 20, 2020

4) NewView Capital of China holds a 19.89% equity interest

5) lithium project in Mali and in addition gold activity in Côte d'Ivoire

Overview of listed COBALT focused companies (by market capitalization)

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization	
			July 1 2021	year-end 2020		H	L	CNY billion	US\$ billion
Zhejiang Huayou Cobalt	Shanghai 603799		CNY 110.00	CNY 79.30	39	CNY 116.52	CNY 33.85	CNY billion 133.8	US\$ billion 20.1
First Cobalt	TSX.V	FCC	C\$ 0.30	C\$ 0.37	-19	C\$ 0.46	C\$ 0.12	C\$ million 148.5	US\$ million 120.3
Nickel 28 *	1) TSX.V	NKL	1.02	0.48	115	1.11	0.15	87.4	70.8
Canada Silver Cobalt Works	TSX.V	CCW	0.40	0.58	-31	0.77	0.35	49.5	40.1
Fortune Minerals	TSX.V	FT	0.13	0.08	73	0.27	0.06	47.6	38.5
Quantum Battery Metals	3) CNX	QBAT	5.50	0.55	900	5.50	0.80	33.2	26.9
Sienna Resources	2) TSX.V	SIE	0.10	0.06	73	0.17	0.05	11.4	9.2
Cobalt Blockchain	TSX.V	COBC	0.05	0.07	-29	0.17	0.04	10.9	8.8
Cruz Cobalt	CNX	CRUZ	0.11	0.05	110	0.18	0.04	10.1	8.2
Fuse Cobalt	TSX.V	FUSE	0.09	0.04	113	0.33	0.03	9.4	7.6
Global Energy Metals	TSX.V	GEMC	0.27	0.30	-10	0.35	0.14	6.4	5.2
Fjordland Exploration	4) TSX.V	FEX	0.08	0.11	-27	0.27	0.05	6.1	4.9
Power Group Projects	TSX.V	PGP	0.10	0.07	36	0.16	0.04	4.6	3.7
Bolt Metals	CNX	BOLT	0.37	0.29	28	0.70	0.09	4.5	3.6
Jervois Mining	ASX	JRV	A\$ 0.58	A\$ 0.39	49	A\$ 0.67	A\$ 0.16	A\$ million 465.3	US\$ million 349.0
Cobalt Blue Holdings	ASX	COB	0.29	0.18	58	0.52	0.08	78.2	58.7
Ardea Resources	ASX	ARL	0.57	0.41	41	0.63	0.27	72.8	54.6
A-Cap Energy	5) ASX	ACB	0.06	0.03	100	0.08	0.007	53.2	39.9

* featured as a **Special Situation** and included in 2020/2021 Shortlist of investment recommendations

1) name change from Conic Metals effective January 12, 2021

2) cobalt-nickel-copper project in Sweden

3) name change from Quantum Cobalt effective March 23, 2021

4) Nickel-copper-PGE project in Manitoba, USA and Nickel-copper-cobalt project in Newfoundland and Labrador, Canada

5) besides farm-in and Joint Venture Agreement with Blackham Resources to acquire a 75% interest in cobalt and nickel associated metals of the Wilconi Project in Western Australia, also major uranium project in Botswana

Overview of listed GRAPHITE focused companies (by market capitalization)

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization	
			July 1 2021	year-end 2020		H	L	A\$ million	US\$ million
			A\$	A\$		A\$	A\$	A\$ million	US\$ million
Syrah Resources	ASX	SYR	1.07	0.96	11	1.38	0.29	533.1	399.8
Talga Resources	ASX	TLG	1.37	1.62	-16	2.15	0.48	413.9	310.4
Ecograf	ASX	EGR	0.60	0.17	250	1.10	0.06	267.7	200.7
Magnis Energy Technologies	ASX	MNS	0.28	0.20	38	0.50	0.08	234.1	175.6
Bass Metals	ASX	BSM	0.006	0.003	100	0.014	0.002	26.3	19.7
			C\$	C\$		C\$	C\$	C\$ million	US\$ million
Nouveau Monde Graphite	TSX.V	NOU	9.69	10.30	-6	27.40	1.80	359.6	291.3
Zen Graphene Solutions	TSX.V	ZEN	3.47	3.58	-3	3.77	0.39	307.8	249.3
NextSource Materials	TSX.V	NEXT	2.64	0.90	193	5.30	0.30	258.1	209.1
Mason Graphite	TSX.V	LLG	0.69	0.48	44	1.19	0.15	94.0	76.1
Graphite One	TSX	GPH	1.03	0.49	110	2.40	0.36	73.5	59.5
Focus Graphite	TSX.V	FMS	0.09	0.06	64	0.28	0.02	43.6	35.3
SRG Mining	TSX.V	SRG	0.50	0.58	-14	1.05	0.41	40.1	32.4
Northern Graphite	TSX.V	NGC	0.48	0.29	68	0.70	0.17	37.8	30.6
Ceylon Graphite	TSX.V	CYL	0.21	0.22	-7	0.62	0.09	26.5	21.5
Lomiko Metals	TSX.V	LMR	0.14	0.06	145	0.28	0.03	23.6	19.1
Canada Carbon	TSX.V	CCB	0.12	0.18	-33	0.37	0.12	14.7	11.9
Eagle Graphite	TSX.V	EGA	0.14	0.05	211	0.38	0.03	5.3	4.3
			US\$	US\$		US\$	US\$	US\$ million	US\$ million
Westwater Resources	NASDAQ	WWR	4.76	4.93	-3	14.50	1.34	158.5	158.5

Overview of listed VANADIUM focused companies (by market capitalization)

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization	
			July 1 2021	year-end 2020		H	L	£ million	US\$ million
			GBp	GBp		GBp	GBp	£ million	US\$ million
Bushveld Minerals	AIM	BMN	13.15	19.70	-33	24.50	10.22	154.9	213.8
			A\$	A\$		A\$	A\$	A\$ million	US\$ million
TNG	1) ASX	TNG	0.06	0.09	-33	0.13	0.06	76.2	57.2
Australian Vanadium	ASX	AVL	0.02	0.01	100	0.04	0.009	58.6	44.0
Technolpgy Metals Australia	ASX	TMT	0.34	0.33	3	0.48	0.17	50.0	37.5
Vanadium Resources	ASX	VR8	0.06	0.03	100	0.10	0.02	25.9	19.4
			GBp	GBp		GBp	GBp	£ million	US\$ million
Aura Energy	2) AIM	AEE	0.07	0.40	-83	0.13	0.02	25.7	35.5
			C\$	C\$		C\$	C\$	C\$ million	US\$ million
Silver Elephant Mining *	3) TSX	ELEF	0.26	0.49	-48	0.59	0.24	53.4	43.2
First Vanadium	TSX.V	FVAN	0.70	0.47	51	0.76	0.24	52.7	42.7
Blue Sky Uranium *	4) TSX.V	BSK	0.21	0.19	11	0.33	0.09	33.2	26.9
Vanadium One Iron	5) TSX.V	VONE	0.23	0.13	77	0.36	0.07	18.4	14.9
CellCube Energy Storage	CNX	CUBE	0.03	0.03	0	0.06	0.02	4.4	3.6
Vanadian Energy	TSX.V	VEC	0.09	0.05	70	0.11	0.03	3.6	2.9

* featured as a **Special Situation** and included in 2020/2021 Shortlist of investment recommendations

1) vanadium-titanium-iron project

2) also uranium project in Mauretania

3) announced on May 14, 2021 to spin out vanadium and nickel assets

4) uranium-vanadium project

5) vanadium-iron-titanium project; name change from Vanadium One Energy effective June 5, 2019

Overview of listed MANGANESE focused companies (by market capitalization)

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization million	
			July 1 2021	year-end 2020		H	L	local	US\$
American Manganese	TSX V	AMY	C\$ 1.30	C\$ 0.41	217	C\$ 2.86	C\$ 0.17	C\$ million 283.3	US\$ million 229.5
Euro Manganese	TSX V	EMN	0.46	0.48	-3	0.85	0.06	171.1	138.6
Giyani Metals	TSX	EMM	0.43	0.38	13	0.87	0.12	74.9	60.6
Manganese X Energy	TSX V	MN	0.36	0.28	29	1.11	0.08	42.8	34.7
Element 25	ASX	E25	A\$ 2.20	A\$ 1.51	46	A\$ 2.90	A\$ 0.40	A\$ million 327.3	US\$ million 245.5

Overview of listed TUNGSTEN focused companies (by market capitalization)

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization	
			July 1 2021	year-end 2020		H	L	C\$ million	US\$ million
Almonty Industries	TSX	All	C\$ 1.05	C\$ 0.64	64	C\$ 1.30	C\$ 0.56	C\$ million 202.1	US\$ million 163.7
EQ Resources	1) ASX	EQR	A\$ 0.03	A\$ 0.04	-20	A\$ 0.05	A\$ 0.02	A\$ million 36.8	US\$ million 27.6

1) formerly *Carbine Tungsten*; new name change from *Specialty Metals* effective December 2, 2020; also *lithium assets* in *Chile* and *gold* exploration licences in *NSW, Australia*

Overview of listed TITANIUM focused companies (by market capitalization)

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization	
			July 1 2021	year-end 2020		H	L	US\$ million	US\$ million
Tronox	NYSE	TROX	US\$ 22.40	US\$ 14.62	53	US\$ 24.81	US\$ 6.60	US\$ million 3,390.0	US\$ million 3,390.0
Kronos Worldwide	NYSE	KRO	14.32	14.91	-4	18.41	9.49	1,650.0	1,650.0
Iluka Resources	ASX	ILU	A\$ 8.70	A\$ 6.49	34	A\$ 10.42	A\$ 4.88	A\$ million 3,670.0	US\$ million 2,752.5
BlueJay Mining	1) AIM	JAY	GBp 10.72	GBp 12.38	-13	GBp 15.76	GBp 5.63	£ 104.2	143.7

1) Dundas ilmenite project in Greenland; also joint venture and earn-in agreement with *Rio Tinto* to advance *Enonkoski* nickel project in *Finland*

Overview of listed REE focused companies (by market capitalization) - traditional countries-

July 1, 2021		Trading symbol		Share price		Change in %	12 months prices		Market capitalization million	
				July 1 2021	year-end 2020		H	L		
US:										
Rare Element Resources	1)	OTC US	REEMF	US\$ 1.84	US\$ 1.08	70	US\$ 4.13	US\$ 0.47	US\$ million 193.8	US\$ million 193.8
Texas Mineral Resources		OTC US	TMRC	2.04	1.77	15	4.70	1.20	144.8	144.8
Ucore Rare Metals										
		TSX V	UCU	C\$ 1.00	C\$ 1.18	-15	C\$ 2.97	C\$ 0.70	C\$ million 49.1	US\$ million 39.8
Canada:										
Search Minerals		TSX V	SMY	C\$ 0.21	C\$ 0.07	215	C\$ 0.37	C\$ 0.04	C\$ million 66.9	US\$ million 54.2
Medaillon Resources		TSX V	MDL	0.31	0.29	7	0.75	0.13	20.8	16.8
Commerce Resources		TSX V	CCE	0.25	0.33	-23	0.50	0.19	20.6	16.7
Canada Rare Earth	2)	TSX V	LL	0.09	0.10	-10	0.22	0.05	18.2	14.7
Eagle Plains Resources		TSX V	EPL	0.17	0.15	17	0.19	0.12	17.0	13.7
Appia Energy		CNSX	API	0.14	0.41	-67	0.84	0.13	14.4	11.7
Marvel Discovery	3)	TSX V	MARV	0.16	0.07	138	0.19	0.05	11.5	9.3
Australia:										
Lynas Rare Earths		ASX	LYC	A\$ 5.77	A\$ 4.18	38	A\$ 6.82	A\$ 0.18	A\$ million 5,190.0	US\$ million 3,892.5
Alkane Resources	4)	ASX	ALK	1.12	0.97	15	1.54	0.66	666.8	500.1
Hastings Technology Metals		ASX	HAS	0.17	0.19	-8	0.27	0.11	295.5	221.6
Northern Minerals		ASX	NTU	0.03	0.04	-17	0.07	0.02	164.8	123.6
Arafura Resources		ASX	ARU	0.13	0.13	0	0.30	0.06	146.3	109.7
Western Europe:										
Greenland:										
Greenland Minerals	5)	ASX	GGG	A\$ 0.10	A\$ 0.28	-65	A\$ 0.36	A\$ 0.07	A\$ million 132.8	US\$ million 99.6
Sweden:										
Leading Edge Materials	6)	TSX V	LEM	C\$ 0.26	C\$ 0.37	-30	C\$ 0.45	C\$ 0.11	C\$ million 38.2	US\$ million 30.9

1) approximately 49% held by Synchron, an affiliated General Atomics privately held group of companies

2) vertically integrated REE business

3) also uranium assets

4) also gold producer

5) world's largest undeveloped multi-element REE-uranium-zinc occurrence

6) also graphite and lithium properties in Sweden and 515 nickel-cobalt exploration alliance in Romania

Overview of listed REE focused companies (by market capitalization) - emerging countries

July 1, 2021	Trading symbol		Share price		Change in %	12 months prices		Market capitalization million		
			July 1 2021	year-end 2020		H	L			
Africa:										
Namibia:										
Namibia Critical Metals	6)	TSX.V	NMI	C\$ 0.38	C\$ 0.25	55	C\$ 0.43	C\$ 0.18	C\$ million 71.6	US\$ million 58.0
Angola:										
Pensana Plc		AIM	PRE	GBP 1.08	GBP 1.94	-45	GBP 2.08	GBP 0.20	£ million 218.9	US\$ million 302.1
Tanzania:										
Peak Resources		ASX	PEK	A\$ 0.11	A\$ 0.07	44	A\$ 0.14	A\$ 0.02	A\$ million 171.0	US\$ million 128.3
Burundi:										
Rainbow Rare Earths		AIM	RBW	GBP 14.50	GBP 10.75	35	GBP 21.50	GBP 2.53	£ million 68.9	US\$ million 95.1
Malawi:										
Mkango Resources		TSX.V	MKA	C\$ 0.43	C\$ 0.28	55	C\$ 0.59	C\$ 0.08	C\$ million 57.6	US\$ million 46.6
Globe Metals and Mining		ASX	GBE	A\$ 0.17	A\$ 0.04	313	A\$ 0.19	A\$ 0.01	A\$ million 76.9	US\$ million 57.7
Central Asia:										
Kyrgyzstan:										
Stans Energy		TSX.V	HRE	C\$ 0.01	C\$ 0.01	0	C\$ 0.01	C\$ 0.005	C\$ million 1.8	US\$ million 1.5
6) heavy rare earths joint venture with <u>JOGMEC</u> of <u>Japan</u>										

CALENDAR OF MINING EVENTS



Uraniumletter INTERNATIONAL

Strategic Metals & Rare Earths Letter
INTERNATIONAL

September	8 – 10	World Nuclear Symposium - London
September	14 – 15	MINEX Kazakhstan – Nur Sultan, Kazakhstan
October	5 – 6	DRC Mining Week – Lubumbashi, DRC
October	12 – 14	Eastern Africa Mining and Energy Conference – Nairobi, Kenya
October	25 – 27	Mines and Money / IMARC Intern. Mining – Melbourne, Australia
November	8 – 11	Lithium Latin America – Buenos Aires, Argentina
November	16 – 17	The Mining Show – Dubai
November	30	MINEX Eurasia – London

CALENDAR OF MINING EVENTS 2022

February 7 – 10 African Mining Indaba – Cape Town, South Africa



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EASTERN AFRICA
**MINING AND ENERGY
CONFERENCE** OCTOBER 12TH-14TH 2021

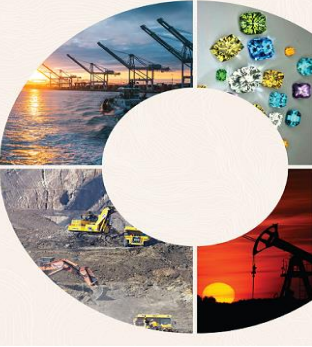
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