



STOCK PRICE \$1.79

NO RATING
NO TARGET

BANDEIRA RESOURCE UPDATE & PEA

Bandeira PEA Highlights Robust Economic Potential and Long Mine Life

OUR TAKE: This morning, Lithium Ionic delivered a resource update and Preliminary Economic Assessment (PEA) for the Banderia deposit at its Itinga Project in Minas Gerais, Brazil. The resource update integrated significant infill and extensional drilling conducted at the project since the data cut-off for the June 2023 maiden MRE, and we expected this update to include a significant increase in resource confidence. The update did not disappoint, with Measured & Indicated resource tonnes increasing 198%. With the slight average grade bump reported, the contained LCE in the M&I jumps 209%. LTH still managed to increase Inferred resources (+29% contained LCE), netting significant all-categories resource growth at Bandeira overall (+78% contained LCE, all-categories). The PEA outlines very robust potential economics (Figure 1) at Bandeira, with low OPEX of just US\$349/t of 5.5% Li₂O spodumene concentrate equivalent (SC5.5) vs average selling price of assumptions of US\$1,859/t SC5.5 and US\$865/t SC3 suggesting excellent operating margins. The up-front CAPEX hurdle for this 20-year underground mining concept of US\$233M compares favourably to the projected average annual Revenue and Free Cash Flow of US\$337M and US\$243M, respectively, delivering a quick 14-month projected payback on the project (Figure 1). With the company trading at an EV of ~US\$168M vs the PEA Post-Tax NPV_{8%} of Bandeira alone coming in at US\$1.6B, the Company appears highly attractive at current levels. LTH is trading at 0.29x EV/consensus NAV vs hard rock peers averaging 0.53x (Figure 7), suggesting excellent re-rating potential as LTH continues to systematically expand and de-risk its portfolio of projects.

KEY HIGHLIGHTS

- ♦ Bandeira PEA Indicates Very Robust Economic Potential (Figure 1):
 - Scope: 1.3Mtpa underground ore mining rate, producing 217.7kt of 5.5% Li₂O spodumene concentrate equivalent (SC5.5) for 20-years (annual production of 187.2ktpa SC5.5, plus 56.8ktpa SC3 tails concentrate. SC5.5: SC3 production ratio of 3.293:1). Spodumene concentrate price assumptions of US\$1,859/t SC5.5 and US\$865/t SC3. (Figure 2,5,6)
 - CAPEX: US\$233M
 - OPEX (All-in before transportation): US\$349/t SC5.5 equivalent (plus US\$120/t shipped to Shanghai)
 - Post Tax NPV_{8%}: US\$1.6B
 - ♦ **Post Tax IRR:** 121%
 - Post Tax Payback: 14 months
- Bandeira Resource Update Highlights: The Bandeira resource grows 78% overall in contained LCE (all-categories), with a 209% increase in contained LCE in the Measured & Indicated categories, now approaching 1.0Bt LCE (all-categories), based on 204 holes (+84 holes vs June MRE).

Jun-23				Oct-23	
Category	tonnes	% Li ₂ O	LCE t	Category	tonr
M&I	4,599,102	1.35%	153,798	M&I	13,720
inf	11,444,782	1.43%	405,814	inf	15,790
	16.043.884	1.41%	559.612		29.510

				% Change	% Change
egory	tonnes	% Li ₂ O	LCE t	tonnage	Contained LCE
d	13,720,000	1.40%	475,014	198%	209%
	15,790,000	1.34%	523,252	38%	29%
	29,510,000	1.37%	998,266	84%	78%

Next Steps at Bandeira: With the PEA on Banderia outlining a robust low-cost, long mine-life spodumene concentrate production concept, Lithium lonic has a strong pipeline of catalysts moving forward. Banderia was rapidly advanced from drilling, through resource delineation, through to preliminary economics, and LTH plans to deliver a Definitive Feasibility Study (DFS) and Environmental Impact Assessment by year-end, which will lead the commencement of the environmental permitting process.

BOTTOM LINE: Lithium Ionic continues to rapidly advance its Itinga Project, with further de-risking milestones on the horizon, including a DFS on Bandeira later this year, with the PEA showing world class low-cost operating costs, a manageable CAPEX hurdle and robust economics. The PEA is just the tip of the iceberg for LTH, covering just one of its evolving projects within its growing portfolio. We expect LTH to continue to identify, define and grow resources at Itinga and across its portfolio and systematically de-risk these assets with similar efficiency we have witnessed at Bandeira. We also expect further drill results from the exploration drill programs at both Itira and Salinas, where initial results look promising as LTH develops the projects within its growing portfolio. The Environmental Impact Assessment studies for both the Bandeira and Outro Lado deposits are expected to be complete by the end of the year at which time the applications are expected to be submitted for environmental and social licenses.

KEY STATISTICS AND METRICS

52-Wee	k High/Low	\$3.05 / \$1.28	Debt	\$ 0.0 M
YTD Per	formance	10.2%	Enterprise Value	\$ 216.7 M
Dividen	d Yield	NA	Daily Volume (30 days)	386,892
Shares (D/S	138.2 M	Currency	C\$ unless noted
Market	Capitalization	\$ 246.7 M	Website	www.lithiumionic.com
Cash		\$ 30.0 M	CEO	Blake Hylands



Source: Capital IQ, and Haywood Securities

^{*}Haywood Calculations

Figure 1: Bandeira PEA Financial Highlights (US\$)

Project Economics	
Post - Tax NPV ₈	\$1.6 billion
Post - Tax IRR	121%
Pre - Tax NPV ₈	\$2.3 billion
Pre - Tax IRR	163%
Annual Revenue – Average	\$337 million
Annual Free Cash Flow	\$243 million
Payback	14 months
Economic Assumptions & Parameters	
SPO 5.5% Li2O Price, CIF China	\$1,859/t
SPO 3.0% Li2O Price, CIF China	\$865/t
Exchange rate	US\$5.00 /R\$
Discount Rate	8%

Source: Lithium Ionic Corp.

Figure 2: Bandeira PEA Operating Concept

Production Profile	
Total Project Life (LOM)	20 years
Total LOM production (ore mined)	22.9 Mt
Nominal Plant Capacity	1.3 Mtpa
Average plant throughput	1.26 Mtpa
Run-of-Mine grade, Li2O (ore diluted)	1.23%
Run-of-Mine underground mine dilution	16.8%
Waste generation Average	439 ktpa
SPO Annual Production @ 5,5% Li2O	187 ktpa
SPO Annual Production @ 3,0% Li2O	56 ktpa
SPO Annual Production @ 5.5% Li2O Equivalent	218 ktpa
SPO 5,5% Li2O metallurgical recovery	67.0%
SPO 3,0% Li2O metallurgical recovery	10.7%
SPO 5,5% Li2O mass recovery	15.2%
SPO 3,0% Li2O mass recovery	4.5%
Project Capital Costs	
Mine (Development + Equipment's + Pre-Production)	\$72.5 million
Plant	\$80.5 million
Environmental	\$2.9 million
Engineering Services	\$20.0 million
General Infrastructure & Others	\$10.3 million
Contingency (25%)	\$46.6 million
Total Capital Cost Estimate	\$232.8 million
SUDENE Incentive tax benefit over first 10 years	75%
Operating Costs (OPEX)	
Operating costs (based on ore processed)	\$61/t ore
Mining	\$45/ t ore
Processing + Tailings handling	\$12/ t ore
SG&A	\$4/t ore
Operating costs (based on SPO 5.5 concentrate produced)	\$349/t SPO 5.5E
Mining	\$258/t SPO 5.5E
Processing + Tailings handling	\$68/t SPO 5.5E
SG&A	\$23/t SPO 5.5E
Transportation costs to customer destination (Mine in Itinga - Araçual to Shanghai Port, China)	\$120/t SPO

 ${\bf Source: Lithium\ Ionic\ Corp.}$



Figure 3: Bandeira PEA NPV_{8%} Sensitivities – Post Tax

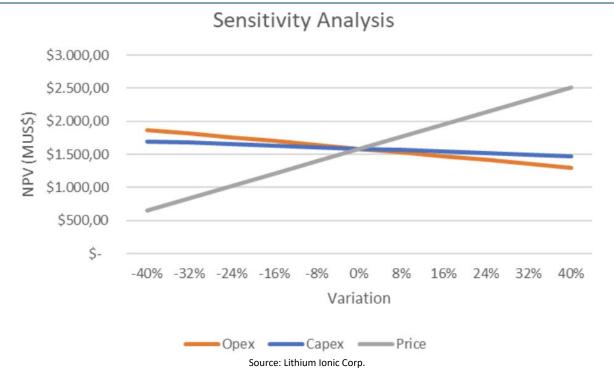


Figure 4: Bandeira PEA Mine Production Plan (RoM tonnes and Head Grade)

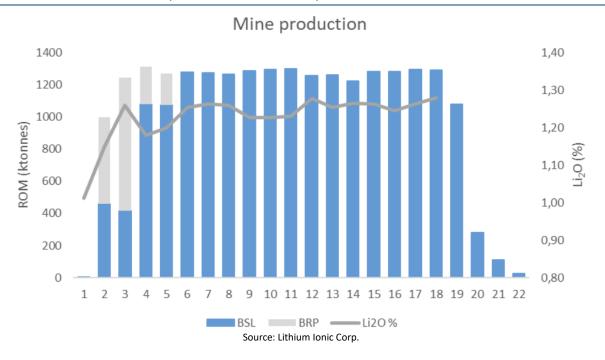


Figure 5: Bandeira PEA Project Layout

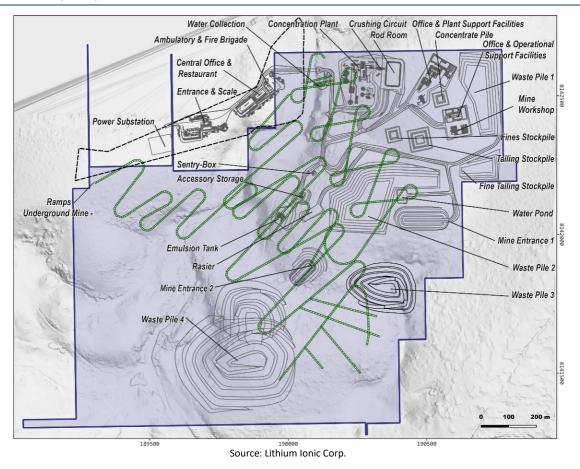


Figure 6: Bandeira PEA Simplified Process Flow Sheet

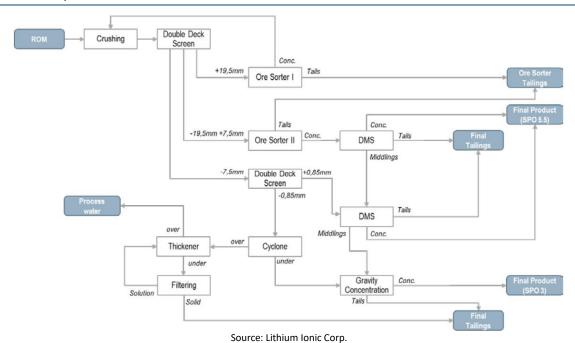


Figure 7: Haywood Lithium Comps

Consensus Targets		Market Data		Comps - EV/t LCE			NAV Comps		Cash Flow Comps				
Company (Tiakar)			loodied	Shares	Market	Enterprise	Total Attributable	EV/ tonne	IBES	Drice /		P/CFPS	
Company (Ticker) Haywood Covered Names bold	Share Price	Consensus Target	Implied Return	Outst. (millions)	Capitalization (millions)	Value (USD) (millions)	Reserves & Resources kt	Reserves & Resources	Consensus	Price / Nav	2022		2024
Sociedad Química (SQM-NYSE)	\$53.83	\$83.93	56%	286	\$15,376	\$16,701	63,541	\$263			4.7x	5.6x	5.1:
Lithium Americas (LAAC-T)	\$9.12	\$26.30	188%	160	\$1,460	\$785	35,689	\$22	\$52.26	0.17x	45.0	7.4	7.4
Allkem Limited (AKE-AU) Lake Resources (LKE-AU)	\$11.11 \$0.18	\$15.65 \$1.02	41% 484%	639 1,422	\$7,100 \$249	\$4,182 \$105	32,097 26,584	\$130 \$4	\$16.62 \$1.61	0.67x 0.11x	15.8x	7.1x	7.1:
Albemarle Corporation (ALB-NYSE)	\$146.93	\$251.22	71%	117	\$17,241	\$20,278	20,479	\$990	Ψ1.01	0.11%	9.4x	5.8x	6.4
Lithium Americas (LAC-T)	\$10.30	\$17.59	71%	160	\$1,648	\$1,097	19,015	\$58	\$25.32	0.41x			
E3 Lithium (ETL-V)	\$2.98	\$12.25	311%	75	\$223	\$148	16,920	\$9					
American Lithium (LI-V)	\$1.61 \$50.52	\$9.33	480%	215	\$346	\$238	15,718	\$15 \$7.204	\$9.73	0.17x 0.90x	4 7v	5.1x	E 2
Rio Tinto (RIO-LSE) Pilbara Minerals (PLS-AU)	\$3.86	\$71.81 \$4.74	42% 23%	1,621 3,009	\$81,896 \$11,617	\$108,839 \$5,532	14,720 13,065	\$7,394 \$423	\$56.32 \$4.17	0.90x 0.93x	4.7x 13.8x	3.6x	5.2 14.1
Livent Corporation (LTHM-NYSE)	\$16.55	\$31.39	90%	180	\$2,974	\$3,150	12,729	\$247	V	0.00%	7.3x	9.2x	6.9
ERAMET S.A. (ERA-ENXTPA)	\$63.25	\$124.80	97%	29	\$1,805	\$3,116	9,929	\$314			1.9x	4.0x	3.0
AVZ Minerals (AVZ-AU)	\$0.78	04.40	4050/	3,529	\$2,752	\$1,914	8,430	\$227	***	0.05			
Galan Lithium (GLN-AU) Noram Lithium (NRM-V)	\$0.73 \$0.44	\$1.49 \$4.27	105% 870%	353 89	\$256 \$39	\$134 \$22	7,260 6,265	\$18 \$4	\$2.88 \$18.18	0.25x 0.02x			
Toyota Tsusho (8015-TSE)	\$8,049.00	\$9,170.00	14%	352	\$2,832,139	\$29,043	5,656	\$5,135	ψ10.10	0.02X		22.5x	7.6
Liontown Resources (LTR-AU)	\$2.79	\$2.78	(1)%	2,202	\$6,144	\$3,751	5,527	\$679	\$2.03	1.37x			
Alpha Lithium (ALLI-NEOE)	\$1.43	\$1.48	3%	188	\$269	\$179	5,014	\$36	\$1.95	0.73x			
Lithium Chile (LITH-V)	\$0.55	\$1.55	182%	206	\$113	\$57	4,096	\$14	604.00	0.50.			
Patriot Battery (PMET-V) Mineral Resources (MIN-AU)	\$10.60 \$61.04	\$19.06 \$75.68	80% 24%	111 194	\$1,181 \$11,823	\$837 \$8,677	3,836 3,649	\$218 \$2,378	\$21.09 \$73.41	0.50x 0.83x	15.4x	13.1x	8.6
European Metals (EMH-AU)	\$0.78	ψ10.00	2470	205	\$159	\$95	3,623	\$26	ψ10.+1	0.000	10.44	10.17	0.0
ioneer Ltd (INR-AU)	\$0.18	\$0.56	221%	2,110	\$369	\$200	3,331	\$60	\$0.44	0.40x			
Sigma Lithium (SGML-NasdaqCM)	\$24.93	\$44.00	76%	109	\$2,727	\$3,044	3,025	\$1,006	\$41.61	0.60x		77.7x	9.1
Lithium Power (LPI-AU)	\$0.54	\$1.01	89%	629	\$337	\$206	2,886	\$71 \$470	ro 00	0.00.			0.0
Sayona Mining (SYA-AU) Piedmont Lithium (PLL-AU)	\$0.09 \$0.52	\$0.23 \$1.65	171% 217%	10,293 1,920	\$875 \$998	\$501 \$548	2,850 2,214	\$176 \$247	\$0.29 \$2.10	0.29x 0.25x		6.2x	2.8
Frontier Lithium (FL-V)	\$1.00	\$4.05	305%	228	\$228	\$148	2,179	\$68	\$4.41	0.23x		0.21	2.12
Infinity Lithium (INF-AU)	\$0.09			463	\$40	\$18	1,682	\$11					
Latin Resources (LRS-AU)	\$0.27	\$0.76	185%	2,632	\$698	\$412	1,477	\$279	\$1.31	0.20x			
EMP Metals (EMPS-CNSX)	\$0.50			71	\$35	\$24	1,386	\$17					
Empire Metals (EP-V) Tibet Mineral (000762-SZSE)	\$0.11 \$22.53	\$39.42	75%	98 521	\$11 \$11,743	\$8 \$1,669	1,349 1,296	\$6 \$1,288			11.0x	8.0x	6.5
Lithium South (LIS-V)	\$0.36	ψ00.4 <u>2</u>	1070	97	\$34	\$22	1,108	\$20			11.00	0.07	0.07
Core Lithium (CXO-AU)	\$0.35	\$0.43	24%	2,137	\$737	\$384	1,019	\$377	\$0.44	0.79x		10.7x	5.9
Lithium Ionic (LTH-V)	\$1.79	\$5.08	185%	138	\$247	\$167	1,121	\$149	\$5.95	0.30x			
Critical Elements (CRE-V) Savannah Resources (SAV-AIM)	\$1.60 \$0.04	\$4.25 \$0.23	166% 546%	218 1,828	\$348 \$64	\$242 \$72	739 726	\$327 \$99	\$4.72 \$0.23	0.34x 0.15x			
AMG Critical (AMG-ENXTAM)	\$25.11	\$46.25	84%	32	\$802	\$1,203	636	\$1,892	\$0.23	U. 15X	4.1x	3.5x	3.3
Green Technology (GT1-AU)	\$0.44	\$1.48	235%	276	\$122	\$71	628	\$113	\$1.58	0.28x	1.12	0.07	0.07
Premier African (PREM-AIM)	\$0.00			25,407	\$113	\$125	527	\$236					
Wealth Minerals (WML-V)	\$0.26	04.00	000/	326	\$85	\$55	525	\$104	04.00	0.50			07.0
Delta Lithium (DLI-AU) Avalon Advanced (AVL-T)	\$0.67 \$0.12	\$1.28	90%	534 560	\$358 \$67	\$172 \$48	445 433	\$386 \$111	\$1.20	0.56x			67.0
Grid Metals (GRDM-V)	\$0.12	\$0.60	380%	175	\$22	\$12	369	\$33	\$0.81	0.15x			
Rock Tech (RCK-V)	\$1.36	\$3.91	188%	97	\$132	\$81	335	\$241	\$3.68	0.37x			
European Lithium (EUR-AU)	\$0.07			1,394	\$92	\$50	319	\$156					
Snow Lake (LITM-NasdaqCM) Argosy Minerals (AGY-AU)	\$1.06 \$0.18	\$0.55	206%	20 1,404	\$22 \$253	\$12 \$145	275 220	\$43 \$659	\$0.70	0.26x			18.20
Vision Lithium (VLI-V)	\$0.10	\$U.33	200%	256	\$255 \$17	\$145	147	\$76	φυ./υ	U.20X			10.2
Lepidico Limited (LPD-AU)	\$0.01			7,638	\$84	\$56	118	\$470					
International Lithium (ILC-V)	\$0.04			249	\$10	\$2	92	\$27					
Imagine Lithium (ILI-V)	\$0.05			277	\$14	\$4	80	\$50					
Foremost Lithium (FAT-CNSX) Compass Minerals (CMP-NYSE)	\$4.10 \$27.40	\$51.43	88%	5 41	\$20 \$1,128	\$16 \$1,795	24	\$649			9.3x	7.2x	6.2
Standard Lithium (SLI-V)	\$4.07	\$9.67	138%	173	\$7,120	\$511			\$11.81	0.34x	3.5X	1.21	0.2
Atlas Lithium (ATLX-NasdaqCM)	\$28.14	\$56.33	100%	11	\$300	\$279			\$51.76	0.54x			
Global Lithium (GL1-AU)	\$1.30	\$2.58	99%	260	\$337	\$174			\$2.45	0.53x			
Nordic Mining (NOM-OB)	\$0.67	ec 22	142%	2,168	\$1,453	\$156 \$146							
5E Advanced (FEAM-NasdaqGS) Brunswick Exploration (BRW-V)	\$2.62 \$0.89	\$6.33	142%	44 188	\$116 \$167	\$140							
Neometals Ltd (NMT-AU)	\$0.30	\$2.61	785%	553	\$163	\$88							
Surge Battery (NILI-V)	\$0.71	\$1.85	160%	156	\$111	\$83							
Century Lithium (LCE-V)	\$0.78	\$2.98	282%	148	\$115	\$74			\$3.57	0.22x			
Firefinch Limited (FFX-AU)	\$0.20 \$0.41			1,181	\$236 \$54	\$72 \$41							
Argentina Lithium (LIT-V) Nova Minerals (NVA-AU)	\$0.41 \$0.28			131 211	\$54 \$59	\$41							
NOA Lithium (NOAL-V)	\$0.40			112	\$45	\$25							
Pure Energy (PE-V)	\$0.81			33	\$27	\$21							
Morella Corporation (1MC-AU)	\$0.01			6,139	\$37	\$20							
Progressive Planet (PLAN-V) Lithium Australia (LIT-AU)	\$0.15 \$0.03			105 1,222	\$16 \$38	\$19 \$19							
Energy Transition (ETM-AU)	\$0.03			1,356	\$38 \$46	\$19							
Champion Electric (LTHM-CNSX)	\$0.09			250	\$23	\$13							
FE Battery (FE-CNSX)	\$0.39			48	\$19	\$10							
Prospect Resources (PSC-AU)	\$0.09	\$0.14	63%	462	\$40	\$9			05.00	0.00	1.0x		
	\$0.10	\$1.75	1,650%	77	\$8	\$5			\$5.83	0.02x			
Grounded Lithium (GRD-V)				50	@1n	[E				I			
ACME Lithium (ACME-CNSX)	\$0.17			59 197	\$10 \$8	\$5 \$5							
		\$0.71	1,157%	59 197 173	\$10 \$8 \$10	\$5 \$5 (\$0)							

Source: Haywood, Company Reports, CapitalIQ, Bloomberg



Important Information and Legal Disclaimers

This report is intended for institutional investors and may only be distributed to non-institutional US clients in the following states: Colorado, Delaware, Illinois, Louisiana, Maryland, Missouri, New Jersey, New York, Ohio, Pennsylvania, Puerto Rico, Rhode Island, Tennessee, West Virginia, Wisconsin. Otherwise, this report may only be distributed into those states with an institutional buyer state securities registration exemption.

Analyst Certification

I, Colin Healey, hereby certify that the views expressed in this report (which includes the rating assigned to the issuer's shares as well as the analytical substance and tone of the report) accurately reflect my/our personal views about the subject securities and the issuer. No part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations.

Important Disclosures

Of the companies included in the report the following Important Disclosures apply:

- As of the end of the month immediately preceding this publication either Haywood Securities, Inc., one of its subsidiaries, its officers or directors beneficially owned 1% or more of Lithium Ionic Corp. (LTH-V).
- Haywood Securities, Inc. or one of its subsidiaries has received compensation for investment banking services from Lithium Ionic Corp. (LTH-V) in the past 24 months.

Distribution of Ratings (as of October 19, 2023)

			IB Clients
	%	#	(TTM)
Buy	74.2%	66	85.7%
Hold	7.9%	7	14.3%
Sell	0.0%	0	0.0%
Tender	0.0%	0	0.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	18.0%	16	0.0%

Link to Research Policy: http://haywood.com/what-we-offer/research/research-policy

