

Lithium Ionic Corp.

LTH-TSX.V: \$2.08

Rating: Speculative Buy

Target: \$6.25

Lithium Ionic Corp. (LTH-TSX.V)

Stock Data	
Previous Close (C\$)	\$2.08
52-Week High-Low	\$3.01 / \$0.70
Avg. Daily Volume (3M)	768,419
Basic SO (MM)	121
Fully Diluted SO (MM)	132
Market Cap. (C\$ MM)	\$252
Cash (C\$ MM)	\$20
Enterprise Value (C\$ MM)	\$232

Clarus Estimates

NAVPS (C\$/share)	\$6.36
P/NAV	0.33x
Potential Return	200%

Company Information

Projects (flagship)	Galvani / Itinga
Project Location	Minas Gerais, Brazil
Resource (Clarus est.)	15.0 Mt
Grade (Clarus est.)	1.50% Li2O

Management

CEO	Blake Hylands
President	Helio Diniz



Company

Lithium Ionic (LTH) has interests in 13,500 ha in Brazil's only lithium producing belt in Minas Gerais, the country's most mining friendly jurisdiction. The flagship claims are located within 800 m of the CBL Mine (private) that has been in production for multiple decades (since 1993, 36k tpy of SC5.5%) and <4 km from near-term producer, SGML (@ ~34k tpy LCE in SC6% from 2023). LTH is in carrying out a 30,000 m drill program (5 rigs) Bandeira and infill program (3 rigs) at Galvani while advancing other targets towards drilling with the objective of delineating a maiden resource in Q2/23 targeting 15 – 20 Mt.

Priming Towards Production in 2024 with a Multi-Billion Dollar Blueprint Next Door

March 17, 2023

Lithium Ionic (LTH) owns ~14,200 ha (& growing) of highly prospective land in the most compelling emerging hard rock district globally – Minas Gerais, Brazil. LTH has already identified 6 km of spodumene-bearing pegmatites across Bandeira and Galvani, with the majority of their land yet to be systematically explored. The claims are located next to a producing mine (CBL) and SGML's Groto do Cirilo (GDC) project, that is expected to become one of the largest hard rock mines in the world, with initial production in Q2/23.

While we see significant exploration upside to swiftly delineate a sizeable resource, what distinguishes LTH from its peers is its potential speed to market with initial production projected in the next 12 months. With a blueprint of production next door, mgmt. plans to fast-track production at Galvani as early as H1/2024 in a low capex, small-scale production scenario that we est. will generate ~US\$170 MM/yr of FCF (mine-level) once fully ramped-up by 2025. We believe this will not only allow LTH to hit the market within the window of elevated lithium prices as the supply/demand deficit is expected to persist over next ~5 years, but will also lay down a strong foundation for growth with potential for full-scale production by 2026. With a near-term resource potential of 15 – 20 Mt, LTH's full-scale operation could be comparable to SGML's Phase 1-only economics of +US\$2 Bn that was based on 11.8 Mt.

*We see numerous near-term re-rating catalysts, incl. ongoing drill results, continued land consolidation, maiden resource in Q2/23, and permitting & development progress on Galvani throughout 2023. We are initiating coverage with a **SPECULATIVE BUY** rating and a target price of **\$6.25** per share based on 1.0x NAV15% (Clarus est.).*

Location, Location, Location!: The flagship Itinga & Galvani claims (+1,300 ha) are located within 800 m of CBL (private), that has been in production since 1993 (36k tpy of SC5.5%) and ~2 km from near-term producer, SGML's (M.cap. ~C\$5.0 Bn) GDC at ~36k tpy LCE in 2023 and growing to +100k tpy LCE in 2024, making it the largest hard rock lithium mine in the Americas. Since 2022, LTH has grown its land package ~10-fold, acquiring strategic claims in the district, incl. most recently, next to Latin Resources' Salinas project (13.3 Mt at 1.2% Li₂O; M.cap. C\$230 MM).

Lithium Friendly Jurisdiction: Brazil has recently eased rules, allowing unrestricted trade in lithium exports. Minas Gerais is a traditional mining jurisdiction with a highly efficient permitting process, access to deep sea ports, clean power, labour and a ~75% reduction in corporate tax rate (Sudene program). SGML progressed from first resource definition (2018) to fully-permitted status within 18 months.

15 – 20 Mt Combined Maiden Resource in Q2/23: Galvani (~2 km west of Xuxa) drilling to date (incl. 1.98% Li₂O over 25.6 m) has demonstrated a potential ~3.5 – 4.5 Mt at ~1.5% Li₂O resource with grades and widths comparable to SGML's Xuxa deposit. Drilling at Bandeira has demonstrated (incl. 1.49% Li₂O at 6.7 m) several stacked parallel, relatively narrow spodumene-bearing pegmatite veins, but with significant combined mineable meterage that should support a 12 – 14 Mt resource.

Priming to Hit the High Lithium Price Window: With supply/demand deficit expected to persist, we expect elevated lithium prices continuing for the next ~5 years. We think LTH is well positioned to benefit from this macro environment as mgmt. plans to leverage the infrastructure & blueprint for production of its neighbours (SGML & CBL) to commence development at Galvani under a small-scale permit (simplistic EIA) to produce at a rate of ~50k tpa SC6% by 2024. We est. the operation will generate a FCF (mine-level) of ~US\$170 MM/yr (fully ramped up) for a modest initial capex of US\$25 MM, supporting NPV15% of ~C\$475 MM.

Potential for Over a Billion Dollar NPV Project by Q4/23: Post the maiden resource in Q2/23, mgmt. plans to quickly advance towards a PFS for a full-scale operation by early Q4/23. While early and contingent on engineering studies, we think a full-scale operation could be comparable to SGML's Phase 1 only economics that demonstrated a NPV of +US\$2.0 Bn based on a 11.8 Mt minerable inventory (May 26, 2022 press release) and an initial capex of ~US\$138 MM. Our estimated FCF from small-scale production at Galvani could conceptually fund the majority of the build for the full-scale operation.

Significant Exploration Upside: Based on the large land package (~14,200 ha & growing with planned additional land acquisitions) and prospective location (next to SGML & CBL) we see significant upside beyond the near-term targeted resource. Based on the recent Clarus site visit (February 2023), we think the work that the management team is doing should provide investors with confidence that LTH should be able to build significant tonnage for a large scale stand-alone project.

- We note that our current 4 year mine life for Galvani Small-Scale production scenario is constrained by the amount of drilling done to date. We see the operation continuing well beyond our current estimate based on exploration driven resource expansion that will further enhance the NPV. In addition, our site visit highlighted potentially game-changing, wide intercepts from Bandeira (vs relatively narrow intercepts in previous drilling) that could support swiftly building tonnage.

Numerous Near-Term Re-rate Catalysts: 30,000 m fully-funded drill program ongoing with a total of 8 rigs turning (5 at Bandeira; 3 at Galvani); +50 holes completed at Galvani, 74 holes at Bandeira. Some of the significant near-term catalysts include (i) drill results from Bandeira & Galvani; (ii) maiden resource in Q2/23; (iii) PFS in early Q4/23 on a full-scale operation; (iv) EIA submission for full-scale operating permit by year-end 2023; (v) Commencement of Galvani Small-Scale production in H2/2024 (Clarus est.); (vi) Full-scale permitting approval expected by year-end 2024. With a ~C\$20 MM cash balance (post Neolit acquisition) and C\$14 MM worth of ITM options and warrants, LTH is well funded.

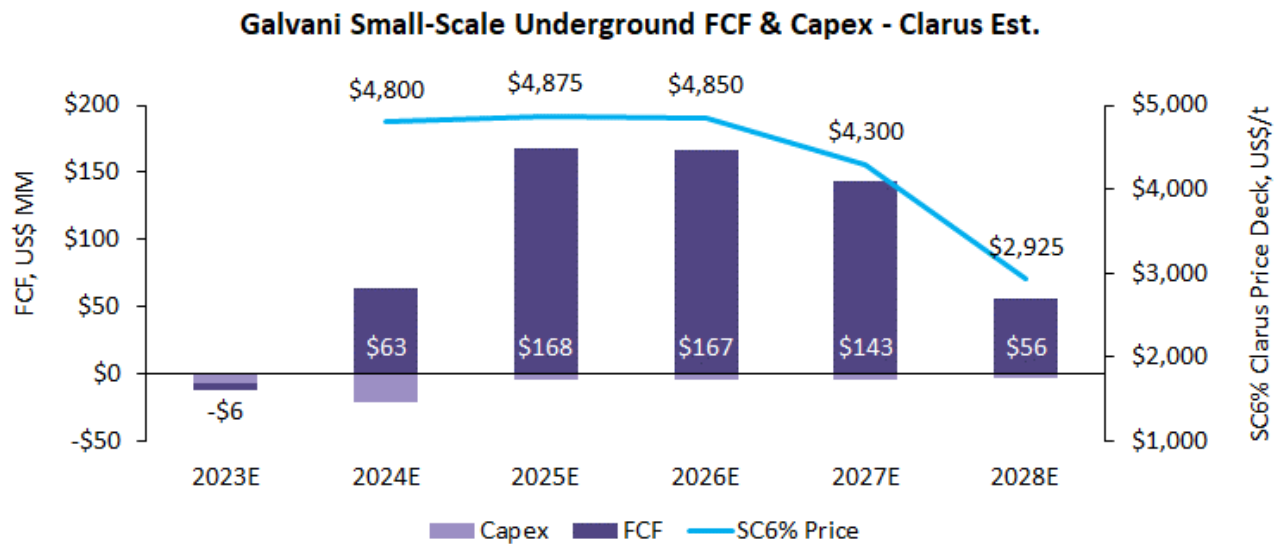
Discounted Valuation vs Peers Indicates Potential For Significant Returns: Given its near-term producer status, we compare LTH to the emerging producer group for the Hard Rock Lithium miners. LTH is currently trading at C\$418/t on EV/Resource (LCE) and 0.33x P/NAV (Clarus est.) or a ~60% discount to emerging producer peers trading at an average of ~C\$1,020/t and 0.84x, respectively. Also, LTH trades at +70% discount to next door neighbour, SGML trading at C\$1,706/t & 0.99x, respectively.

- We further highlight the significant discount to Patriot (PMET-TSX.V; NR) that is advancing its exploration project, Corvette, in Quebec and trading at a mkt. cap of ~C\$1.3 Bn. While LTH, at a mkt cap of C\$265 MM or ~80% discount to PMET, will be in production and free cash flowing in 2024, PMET (Corvette) is unlikely to be permitted for production over the next several years.

Recommendation: We are initiating coverage with a **SPECULATIVE BUY** rating and a target price of **\$6.25** per share based on 1.0x NAV15%. Our estimated NAV is based on a combination of in-situ valuation for resources across Galvani & Bandeira and a mine plan for Galvani Small-Scale production project with FCF discounted at 15%. We have assumed a global resource of 15 Mt at 1.5% Li₂O across Galvani & Bandeira.

- We are using a higher discount rate (vs 10% typical for lithium projects) to account for the lack of independently assessed mineral resources and mine plan for Galvani Small-Scale project. We have assumed an in-situ valuation of C\$800/t, which is a >20% discount to the average for emerging producers. Execution on milestones, including resource delineation and progress towards development at Galvani will see us bring our discount rate and in-situ valuation in line with that of peers, resulting in a conceptual NAV of C\$7.73/share. We further note potential for significant upside from a full-scale operation on the 15 - 20 Mt resource that, while early, may demonstrate economics comparable to SGML's Phase 1 only (+US\$2 Bn), which could conceptually be multiples of our currently estimated in-situ valuation of C\$408 MM. This upside could be confirmed with the PFS planned for early Q4/23.

Figure 1: Galvani Small-Scale – Clarus Estimates



Source: Clarus Securities Inc.

Lithium Ionic Corp. (LTH-TSX.V), SPECULATIVE BUY, Target: C\$6.25

Rating	SPECULATIVE BUY	Target Price	\$6.25	Basic Shares O/S (pro-forma)	121.3
12-Month Return	200%	Previous Close	\$2.08	Market Cap., C\$ MM	\$252
				EV, C\$ MM	\$232

All dollar amounts in USD, unless otherwise noted

CAPITAL STRUCTURE				Strike Price	Shares	FINANCIAL SUMMARY							
				\$/share	(MM)	CALENDAR YEAR	2023E	2024E	2025E	2026E	2027E		
Basic Shares Outstanding						117.3	Spodumene Concentrate (SC6%): Clarus Price Deck						
Shares issued for Neolit Acquisition						4.0	SC6% (US\$/t)						
ITM Warrants Outstanding						4.1		\$4,625	\$4,800	\$4,875	\$4,850	\$4,300	
ITM Options Outstanding						11.5							
Assumed Equity Raise						4.4	EPS	(\$0.03)	\$0.43	\$0.91	\$0.91	\$0.77	
FD Shares						141.3	P/EPS	nm	3.5x	1.7x	1.7x	2.0x	
							Target/EPS	nm	10.6x	5.0x	5.0x	5.9x	
NET ASSET VALUE							CFPS	(\$0.03)	\$0.51	\$1.05	\$1.05	\$0.91	
				Discount rate	C\$ MM	C\$/share	P/CFOPPS	nm	3.0x	1.4x	1.4x	1.7x	
Asset NAV							Target/CFPS	nm	8.9x	4.3x	4.3x	5.0x	
Galvani Small-Scale (100.0%), Brazil						15%	\$476	\$3.37	Income Statement				
Asset NAV Sub-Total						\$476	\$3.37						
Target Setting Multiple on Asset NAV						1.00x	\$476	\$3.37	MM				
In-Situ Valuation													
	Mt	Li ₂ O Grade	LCE										
Galvani & Bandeira	13.8	1.50%	0.5 Mt	@ C\$800 /t	\$408	\$2.88	Revenue	\$0	\$113	\$229	\$227	\$202	
Other					-	-	Operating Expenses	\$0	(\$23)	(\$46)	(\$46)	(\$45)	
In-situ Valuation Sub-total						\$408	\$2.88	Depreciation	\$0	(\$8)	(\$17)	(\$17)	(\$17)
Corporate Adjustments								General & Adm.	(\$1)	(\$2)	(\$3)	(\$3)	(\$3)
Current Cash						\$20	\$0.14	Exploration Exp.	(\$2)	(\$1)	(\$1)	(\$1)	(\$1)
Value of ITM Instruments						\$14	\$0.10	Net Interest Expense	\$0	(\$1)	(\$1)	(\$0)	(\$1)
Long-term Debt						-\$20	-\$0.14	Taxes Expense	\$0	(\$27)	(\$55)	(\$55)	(\$47)
Corporate Adjustments Sub-total						\$14	\$0.10	Net Income	(\$3)	\$50	\$106	\$106	\$90
Total Corporate NAV (50% wt.)						C\$	\$898	\$6.36	Cash Flow Statement				
Target Price						C\$/share	\$6.25	MM					
P/NAV													
PRODUCTION ESTIMATES (100% basis)													
CALENDAR YEAR						2023E	2024E	2025E	2026E	2027E			
Galvani Small-Scale	kt SC6%	-	23	47	47	47							
Others	kt SC6%	-	-	-	-	-							
Companywide						kt SC6%	-	23	47	47	47	47	
COST ESTIMATES (US\$/oz Au)													
CALENDAR YEAR						2023E	2024E	2025E	2026E	2027E			
Total Cash Costs	US\$/t SC6%	\$	-	\$ 980	\$ 982	\$ 981	\$ 970						
Sustaining Capex	US\$/t SC6%	\$	-	\$ 94	\$ 94	\$ 94	\$ 94						
AISC (site-level)						US\$/t SC6%	\$	-	\$ 1,074	\$ 1,076	\$ 1,075	\$ 1,064	

Source: Clarus Securities Inc.

MODELLED MINEABLE INVENTORY					Mine
Spodumene	Mt	Li ₂ O %	kt Li ₂ O	Life (yr)	
Galvani Small-Scale (100.0%), Brazil	1.25	1.50%	18.8	4.25	

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Investment Thesis

We think Brazil will emerge as a 'green lithium' powerhouse over the coming years. The Eastern Pegmatite Province belt, one of the largest lithium-spodumene belts, globally, is primarily located in Minas Gerais, a state with an extensive history of mining, substantial infrastructure, cheap and green hydropower and home to the near-term producing (Q2/23) Sigma Lithium's Groto do Cirilo (GDC) project that is expected to become one of the largest lithium hard rock mines in the world by 2024. Lithium Ionic's claims are strategically located in Minas Gerais, next to a producing mine (CBL; 36k tpy of SC5.5%) and SGML's GDC project (86 Mt at 1.43% Li₂O global resource) as well as next to Latin Resources' Colina deposit (13.3 Mt at 1.2% Li₂O global resource). Lithium Ionic has completed ~25,000 m of drilling to date since April 2022, primarily focusing on the Galvani & Bandeira claims, and we think the Company is well positioned to deliver a sizeable, 15 - 20 Mt at ~1.5% Li₂O resource in Q2/23.

*While we see exploration upside to drive significant resource growth beyond the maiden resource, in our opinion, what really distinguishes LTH from its peers is its potential to be in production at Galvani over the next 12 months and generating ~US\$170 MM/yr in FCF once fully ramped up by 2025. We believe the market is not fully appreciating and valuing the production opportunity at Galvani that will allow LTH to hit the elevated lithium price window, well ahead of the majority of the explorer/developer peers, particularly peers in Canada that face a lengthy permitting process. In addition, the FCF from Galvani could fund the development of a full-scale operation on the 15 - 20 Mt resource that may support economics comparable to that of SGML's +US\$2.0 Bn NPV for Phase 1 only that was based on 11.8 Mt. The opportunity for over-a-billion dollar NPV project could be confirmed in the PFS expected in early Q4/23 and is currently accounted for in the in-situ component of our valuation at C\$408 MM, indicating potential for material upside beyond our current target price. We are initiating coverage of Lithium Ionic with a **SPECULATIVE BUY** rating and a target price of **\$6.25** per share.*

Minas Gerais, Brazil Increasingly in the 'Lithium' Limelight: We believe Brazil is well positioned to become a 'green lithium' powerhouse. It is already Latin America's largest pro-mining jurisdiction for various metals and bulk commodities. The country has one of the world's largest geological belts hosting high quality lithium-bearing spodumene, stretching over 150,000 km² from the state of Bahia, Minas Gerais to Rio de Janeiro. Over 65% of the country's power is derived from hydro sources and recently, Brazil has eased rules on lithium exports, allowing unrestricted trade in lithium products. We further highlight that the state of Minas Gerais is a well-established mining camp with over 60 operating mining operations in total for gold, bulk commodities, base metals, phosphate, rare earth metals & lithium. The state provides good infrastructure, access to deep seaports, clean hydropower, labour and a highly efficient permitting process as highlighted by SGML's advance from resource stage to fully permitted status within 18 months. In addition, industrial projects in the area, incl. SGML's Grota do Cirilo, are expected to benefit from a potential ~75% reduction in corporate tax rate (Sudene program) for first 10 years of operation. We believe Minas Gerais is an emerging globally significant hard rock lithium mining camp that will attract significant investment over the coming years driven by the transition away from fossil fuels.

Premium Real Estate in Minas Gerais: In Minas Gerais, LTH holds premium real estate. The flagship Itinga & Galvani claims (+1,300 ha) are located within 800 m of CBL (private), that has been in production since 1993 (36k tpy of SC5.5%) and ~2 km from near-term producer, SGML (M.cap. C\$5.2 Bn) at ~36k tpy LCE in 2023 and growing to +100k tpy LCE in 2024, making it the largest hard rock lithium mine in the Americas. Since 2022, LTH has grown its land package ~10-fold to ~14,200 ha, acquiring strategic claims in the district, incl. most recently, next to Latin Resources' Salinas project (13.3 Mt at

1.2% Li₂O; M.cap. C\$230 MM). Management plans to continue staking/acquiring additional strategic land packages and could be amongst the largest land holders in the region by year-end.

Exploration to Resource to Economics in Short Order: Since starting drilling in April 2022, LTH has completed ~25,000 m of drilling. Galvani (~2 km west of Xuxa) drilling to date (incl. 1.98% Li₂O over 25.6 m) has demonstrated a potential ~3.5 – 4.5 Mt at ~1.5% Li₂O resource with grades and widths comparable to SGML's Xuxa deposit. Drilling at Bandeira has demonstrated (incl. 1.49% Li₂O at 6.7 m) several stacked parallel, relatively narrow spodumene-bearing pegmatite veins, but with significant combined mineable meterage that should support a 12 – 14 Mt resource. Mgmt. plans to release a maiden resource that we believe will demonstrate 15 – 20 Mt at ~1.5% Li₂O across Galvani & Bandeira in Q2/23, within approx. 1-year of when it first started drilling. The maiden resource will be followed by a PFS in early-Q4/23 for a full-scale operation and EIA submission by year-end. Given Sigma's timeline to fully permitted status, we think LTH may receive its permitting approval by year-end 2024, potentially allowing full-scale project construction in 2025 and initial production in late-2025/early-2026.

Exploration Sizzle: We see significant upside beyond the near-term targeted resource based on the large land package (~14,200 ha & growing with planned additional land acquisitions) and prospective location (next to CBL, SGML & LRS's Colina). LTH has already identified 6 km of spodumene-bearing pegmatites across Bandeira and Galvani, with the majority of their land yet to be systematically explored. Based on the recent Clarus site visit (February 2023), we think the work that the team is doing should provide investors with confidence that LTH should be able to build significant tonnage for a stand-alone project. In addition, our site visit highlighted potentially game-changing, wide intercepts from Bandeira (vs relatively narrow intercepts in previous drilling) that could support swiftly building tonnage.

Cash Flow Positive in 2024!: With supply/demand deficit expected to persist, we expect elevated lithium prices continuing for the next ~5 years. We think LTH is well positioned to benefit from this macro environment as mgmt. plans to leverage the infrastructure & blueprint for production of its neighbours (SGML & CBL), noting that CBL has over 30 years of production and concentrate sales history while SGML has off-take agreements with LG, indicating the acceptability of concentrate quality from the region. LTH plans to commence development at Galvani under a small-scale permit (called LAC – detail page 10), limited to a rate of up to only 300k - 350k tpa of ore extraction that will require a simplistic EIA with a relatively quick permitting approval, within approx. 3 months of submission (application submission expected in September). We believe LTH could commence construction on this low capex development scenario at Galvani in early 2024 and achieve production by mid-2024 with a targeted rate of ~50k tpa SC6%. We estimate the operation will generate a FCF (mine-level) of ~US\$170 MM/yr once fully ramped up for a modest initial capex of ~US\$25 MM, supporting our estimated NPV15% of ~C\$475 MM. In our opinion, a production scenario in 2024 at Galvani with potential for US\$170 MM/yr in FCF clearly distinguishes LTH from a number of junior explorers and developers, particularly in Canada, that are likely several years away from permitting & production. We also note that our current estimated 4 year mine life for Galvani Small-Scale production scenario is constrained by the amount of drilling done to date. We see the operation continuing well beyond our current estimate based on exploration driven resource expansion that will further enhance the NPV.

Attractive Valuation, Poised for a Re-rating: Given its near-term producer status, we compare LTH to the emerging producer group for the hard rock lithium miners. LTH is currently trading at C\$418/t on EV/Resource (LCE) and 0.33x P/NAV (Clarus est.) or a ~60% discount to emerging producer peers trading at an average of ~C\$1,020/t and 0.84x, respectively. We further highlight the significant discount to Patriot Battery Metals (PMET-TSX.V; NR) that is advancing its exploration project, Corvette,

in Quebec and trading at a mkt. cap of ~C\$1.0 Bn supported by recent strong intercepts incl. 156.9 m at 2.12% Li₂O. While LTH, at a market cap of ~C\$250 MM or ~75% discount to PMET, will be in production and free cash flowing in 2024, PMET, despite its excellent drill intercepts from Corvette, is unlikely to be permitted for production over the next several years. We expect LTH to strongly re-rate towards the emerging producer peers group as mgmt. delivers on development milestones over the course of 2023, incl. the maiden resource in Q2/23 (15 – 20 Mt at ~1.5% Li₂O) and PFS in early Q4/23 that may demonstrate project economics for a full-scale operation comparable to that of SGML's +US\$2.0 Bn NPV for Phase 1 only.

Catalysts

1. Drill results from the ongoing 30,000 m program at Galvani, Bandeira – Ongoing;
2. Galvani, Bandeira Resource Update (expect 15 – 20 Mt at ~1.5% Li₂O) – Q2/23;
3. Pre-Feasibility Study (PFS) on full-scale operation – early Q3/23;
4. Galvani Small-Scale mine plan and permit application submission – September 2023;
5. Galvani Small-Scale permit approval – Year-end 2023;
6. EIA submission (baseline studies initiated) for full-scale operating permit – Year-end 2023;
7. Galvani Small-Scale production – H2/2024 (Clarus est.);
8. Full-scale permitting approval – Year-end 2024.

Figure 2: Exploration Upside Makes Bibiani & Chirano Generational Assets



Source: Company Reports

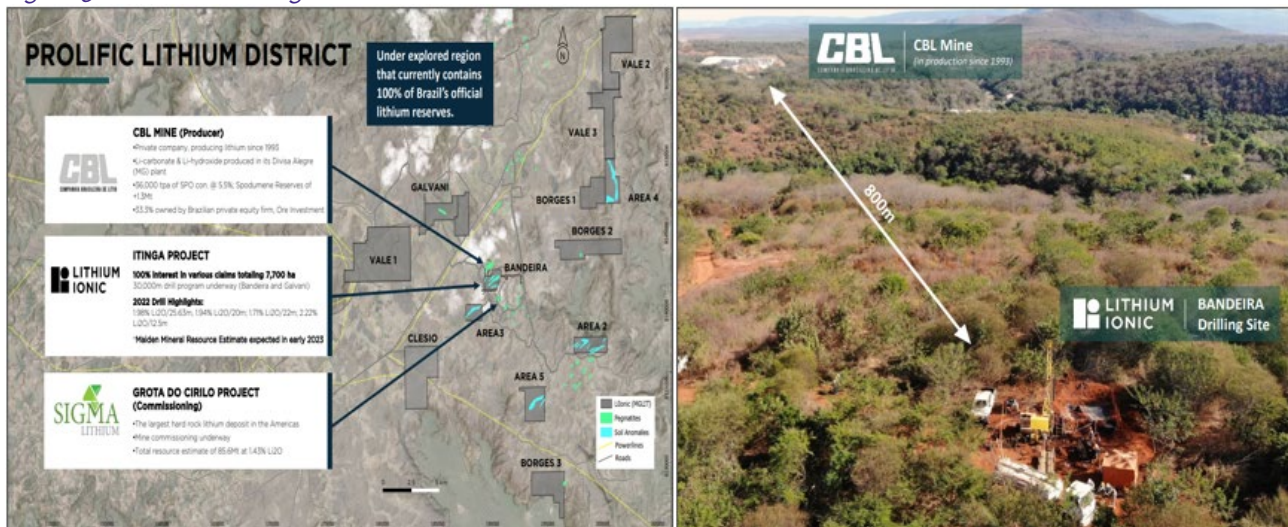
Company Overview

Lithium Ionic Corp. is a hard rock lithium bearing spodumene explorer and developer. It started trading on the TSX.V in May 2022 under the ticker symbol LTH. The Company is focused on spodumene assets in Minas Gerais, Brazil, and has a total land holding of ~14,200 ha.

In 2021, LTH acquired 100% ownership of the Itinga claims (~1,355 ha), located next to CBL & SGML's GDC project. Since then, the Company has grown its land package by ~10-fold. In June 2022, LTH acquired Galvani claims, located ~2 km west of SGML's Xuxa deposit, for ~US\$3.3 MM cash and a future contingent payment of US\$4 MM in cash and shares, contingent on establishing 5 Mt of at-least 1.3% Li₂O within 18 months of closing in September 2022. Drilling at Bandeira commenced in April 2022 and at Galvani in June 2022. In October 2022, LTH closed a C\$25 MM (gross) equity financing at C\$1.60/share. In December 2022, LTH acquired an additional 1,527 ha from Mineração Borges Ltda. for ~C\$130k in cash and a contingent payment of ~C\$3.9 MM if LTH delineates a compliant resource of 2 Mt of at-least 1.3% Li₂O in 18 months of closing. In January 2023, LTH acquired an additional 3,140 ha from Exotic Mineração Ltda. (Vale claims, incl. west of Galvani) for C\$8.4 MM in staged payments (C\$7.8 MM due in July 2024) and a contingent cash payment of ~C\$2.63 MM if LTH delineates a compliant resource of 6 Mt of at-least 1.3% Li₂O. In February 2023, LTH acquired an additional 1,000 ha (Clesio claims) for ~C\$130k in cash and a contingent payment of up to US\$2.0 MM if LTH delineates a compliant resource of 5 Mt of at-least 1.3% Li₂O within 48 months of closing. In March 2023, with the acquisition of Neolit Minerals, LTH acquired an additional 5,713 ha (incl. Salinas claims), located next to Latin Resources' (LRS-ASX; NR) Colina deposit (13.3 Mt at 1.2% Li₂O resource), for ~US\$6 MM cash payment (\$4.5 MM on closing & \$1.5 MM post 18 months), 4 MM LTH shares on closing and 1.5 MM warrants at \$2.25/share strike vested only if LTH establishes a compliant resource of 20 Mt of at-least 1.3% Li₂O.

Strategically Located Land Package

Figure 3: LTH Land Package in Minas Gerais



Source: Company Reports

In Minas Gerais, LTH holds premium real estate. The flagship Bandeira & Galvani claims are located within 800 m of CBL (private), that has been in production since 1993 (36k tpy of SC5.5%) and <4 km from near-term producer, SGML (M.cap. C\$5.2 Bn) at ~36k tpy LCE in 2023 and growing to +100k tpy

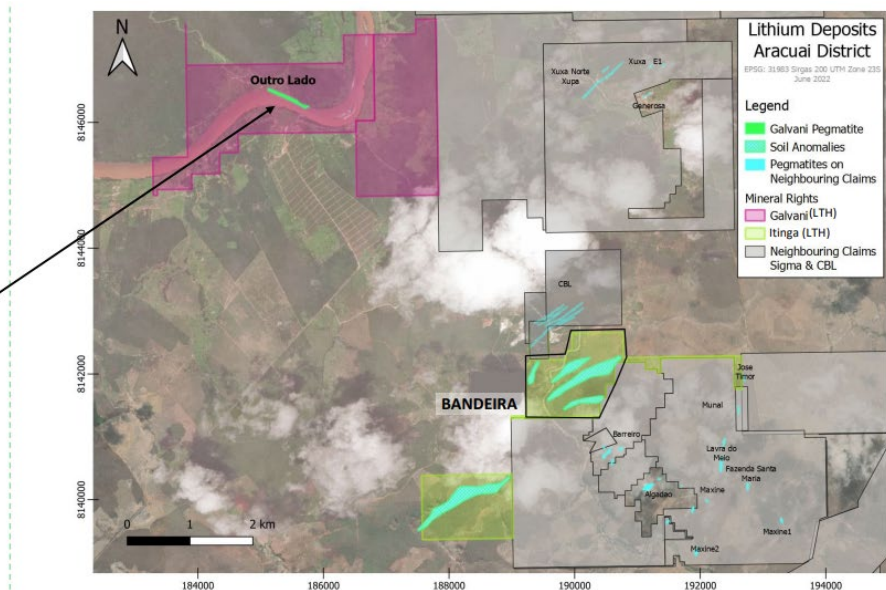
LCE in 2024, making it the largest hard rock lithium mine in the Americas. Since 2022, LTH has grown its land package ~10-fold to ~14,200 ha, acquiring strategic claims in the district, incl. most recently, next to Latin Resources' Salinas project (13.3 Mt at 1.2% Li₂O; M.cap. C\$230 MM). Management plans to continue staking/acquiring additional strategic land packages and could be amongst the largest land holders in the region by year-end. With a current cash balance of ~C\$20 MM (post Neolit acquisition), management is close to completing a 30,000 m drill program across Bandeira and Galvani since drilling began in April 2022, with ~5,000 m of drilling remaining and lots of assays expected to be reported over the coming weeks. There are a total of 8 rigs turning, with 5 rigs at Bandeira and 3 at Galvani. Drilling rate is averaging 1,500m/rig/month and drilling costs are estimated at US\$200/m.

1. Galvani – Provides Path to Near-Term Production

The Galvani project comprises two licenses that are strategically located ~2 km to the west of Xuxa lithium deposit (~21Mt at 1.56% Li₂O global resource) and ~3 km to the northwest of the CBL lithium mining operation. Lithium Ionic acquired the claims in September 2022 for US\$3.3 MM in cash. If LTH establishes a minimum of 5Mt at 1.3% Li₂O resource at Galvani, a contingent payment of US\$2 MM in shares (at min. C\$0.90/share) plus US\$2 MM in cash will be owed to the vendor. Management has recently acquired additional prospective land around Galvani, to the west of it, called Vale 1.

Figure 4: Galvani Target

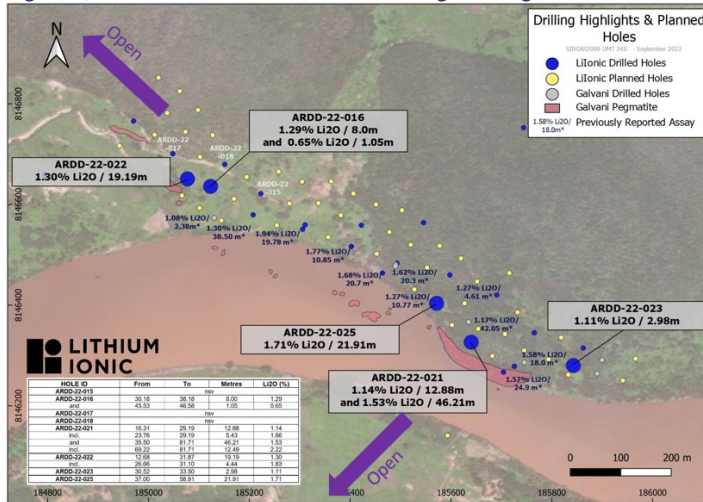
- Acquired in Sept. 2022 for USD\$3,310,000
- Properties located ~2km West of Sigma Lithium's large Xuxa lithium deposit and ~3km NW of the CBL lithium mine
- Mineralized pegmatites already identified (Outro Lado)
- Drilling underway (see results on next slide)



Source: Company Reports

Mineralization at Galvani is hosted in the spodumene bearing pegmatites sourced from the same granitic intrusive that characterizes CBL's lithium mine and SGML's deposits. The previous operator had identified the Outro Lado showing at Galvani and conducted a small scale drill program (7 holes) that indicated potential for a significant resource at the property. **Significant historic drill results incl. 20.25 m at 1.62% Li₂O, 18 m at 1.58% Li₂O and 12 m at 1.78% Li₂O over a ~700 m spodumene bearing pegmatite trend that is currently understood to be oriented in an east-west direction.**

Figure 5: Galvani – Outro Lado Showing Drilling



Source: Company Reports; Clarus Securities Inc.

- Drilling to date has validated the historic drilling, not only confirming the ~700 m of the known strike length of the spodumene bearing pegmatite trend but also successfully extending it by ~300 m towards ~1.0 km. Geological mapping indicates that this pegmatite trend continues to west – open for expansion along strike.
- Significant LTH drill intercepts incl.: **46.2 m at 1.53% Li₂O; 38.5 m at 1.3% Li₂O; 19.8 m at 1.94% Li₂O; 21.9 m at 1.71% Li₂O.**
- **Swiftly building bulk tonnage:**
 - For the drill assays released to date (18 holes assayed), we estimate a wtd. avg. grade of 1.46% Li₂O over an average interval of ~17 m.
 - Mineralization has been intersected from surface and confirmed down to a vertical depth of ~115 m.
 - To date, over 50 drill holes (~16,000 m) have been completed at Galvani. Assays available to date, demonstrate drill tested strike length of ~1,000 m.
 - 3 rigs turning at Galvani doing infill drilling. **While infill drilling is ongoing, we see potential for ~3.5 – 4.5 Mt at ~1.5% Li₂O resource based on the drilled dimensions and assays to date.** We expect the maiden resource expected in Q2/23 to confirm this potential.
 - Note that the drill results released so far are all from the Outro Lado showing while pegmatites have been found all over the Galvani property. Management plans to drill test these over the coming months and exploration success outside the Outro Lado showing will further enhance the potential to quickly build economic tonnage.
 - The recently purchased claims to the west, called Vale 1, have very similar characteristics to Galvani with 2 – 3 km of pegmatites across 2 known outcrops – soil sampling ongoing with drilling expected to start in ~6 weeks.

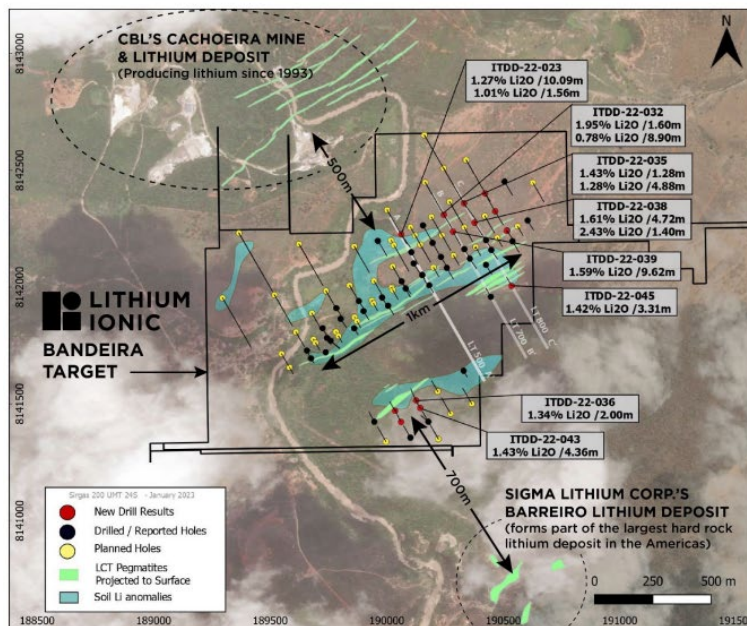
Potential Production at Galvani in 2024

- LTH looking to start production at Galvani potentially by H1/2024.
- This can be done based on a small-scale permit that allows for up to 300 – 350 kt of total ore extraction per year. Under the country's/state's mining code, this scale does not trigger the requirement for a full EIA.
- The small-scale permit under which mgmt. plans to advance Galvani towards production is called Licença Ambiental Concomitante (LAC). The main difference between LAC and the typical full-scale operating permit application is that the LAC requires only a simplistic EIA and allows applying for both Pre-license (LP) and Installation License (LI) at the same time. Whereas a full-scale application first requires submission of a LP with a full EIA. Only once the LP is approved/issued, the application can proceed to the LI assessment stage. As a result, LAC application offers significant time efficiencies with approval expected in ~3 months from submission of the application.
- Management plans to submit the LAC permit application for small-scale production at Galvani in September 2023, with approval for construction expected by year-end 2023.
- Given mineralization is underneath a riverbed (seasonal river), LTH is considering an underground mine at Galvani – consultants are already working on a mine plan. We expect the underground mine plan to access the deposit ~50 m below the riverbed through a ramp/decline. Underground approach will avoid re-directing the river and hence minimizes the footprint, further simplifying the permitting process.
- The access portal for the decline will be located to the south of the seasonal river.
- We see potential for Galvani development to benefit from the infrastructure being setup by SGML for production at Xuxa (expected Q2/23) that is ~2 km east of Galvani. We note that a powerline tie in is available within ~1 km of Galvani.
- The Company plans to utilize a mobile Dense Media Separation (DMS) plant for producing spodumene concentrate of 6% Li₂O (SC6%). We note that CBL also utilized mobile DMS plant for expanding its production towards ~36 ktpa SC5.5%.
- Overall, we estimate an initial capex of US\$25 MM for the small-scale production at Galvani, primarily comprising of 2 – 4 km of pre-production underground development. We expect the mobile DMS plant, crusher and other equipment to be leased (negligible upfront cost).
- Management expects initial production from Galvani in H1/24 and fully ramped up production rate of ~50 kt/year of SC6% from 2025. Based on our assumed mineable inventory of ~1.3 Mt at ~1.5% Li₂O, and a throughput rate of 300 kt/year, we expect an initial mine life of ~4 years. We note that the current est. mine life is primarily a function of drilling and we expect the operations to continue beyond our estimate based on exploration driven resource expansion at Galvani.
- We think underground development will also provide LTH the opportunity to test the depth extensions of the mineralization at Galvani more economically.

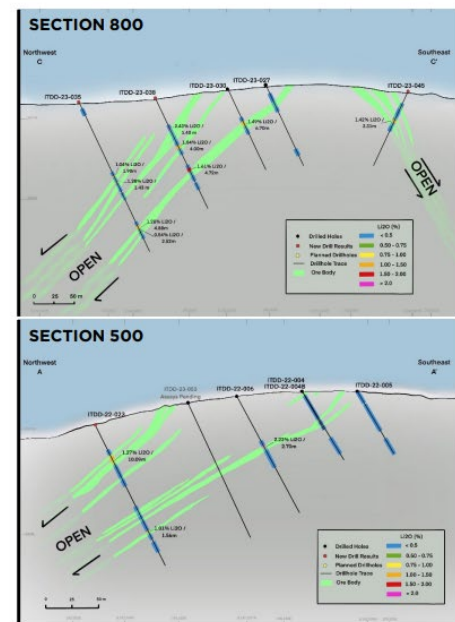
2. Bandeira: 12 – 14 Mt in Maiden Resource in Q2/23

- Bandeira is part of the ~1,355 ha Itinga claims. It is located 800 m south of the CBL Lithium mine and north of SGML's Barreiro deposit (~29 Mt at ~1.4% Li₂O global resource).
- 5 rigs turning at Bandeira and 74 holes have been completed to date with several assays expected over the coming weeks, ahead of the maiden resource in Q2/23.
- Significant assays from Bandeira drilling incl. **1.99% over 6.75 m; 1.93% Li₂O over 5.7 m; 1.55% Li₂O over 3.9 m; 2.23% Li₂O over 2.7 m.**
- Drilling at Bandeira is demonstrating potential for several stacked parallel spodumene-bearing pegmatite veins with significant mineable combined meterage. We estimate a weighted average grade of 1.34% Li₂O over an average interval of 3.2 m.
- While compared to Galvani, drilling at Bandeira has returned relatively narrower intercepts, visual inspection of recent holes drilled close to the border with CBL seem to have returned +20 m wide intercepts (assays pending). There are 2 – 3 holes in the vicinity of this hole but are up-dip of the wide intercept – management plans to drill deeper to test the along-strike & up-dip extensions of the wide mineralization discovered in this recent hole. If proven, this could be game-changing for Bandeira as it will allow LTH to swiftly build tonnage around wide intercepts vs relatively narrow intercepts in previous drilling. Likewise, there are wider intercepts at shallower depths in the southern portion of Bandeira, closer to the border with Sigma.
- We think the maiden resource expected in Q2/23 will demonstrate 12 – 14 Mt at ~1.5% Li₂O at Bandeira.

Figure 6: Bandeira – Recent Drilling & Strategic Location



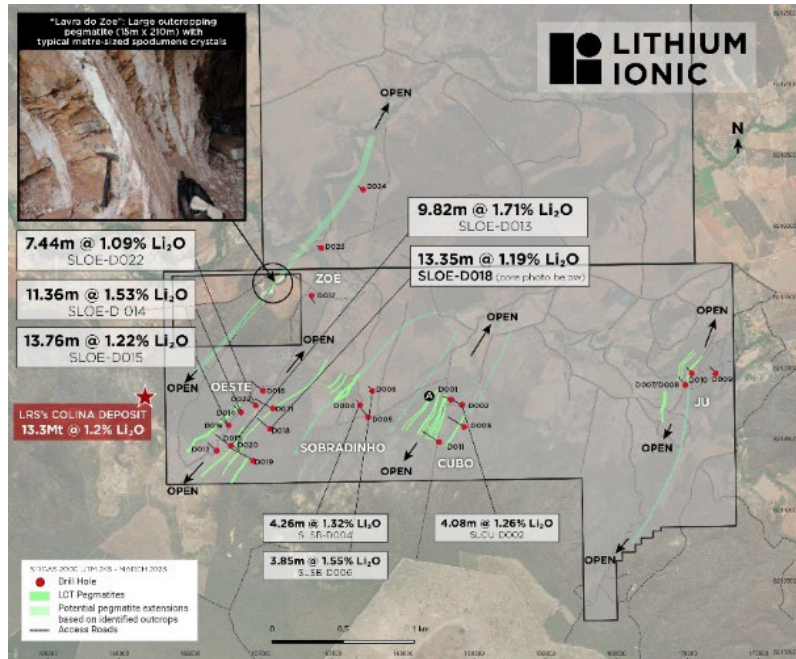
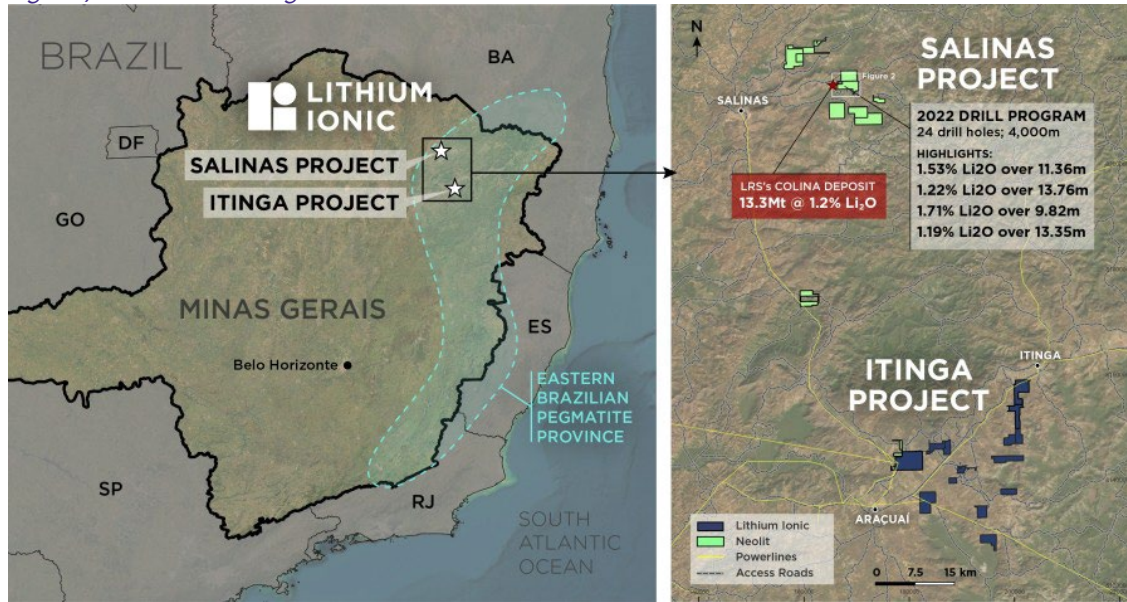
Source: Company Reports



Strong Initial Metallurgical Results for Bandeira & Galvani

- Initial metallurgical testing, using Heavy Liquid Separation (HLS) gravity separation tests achieved excellent metallurgical recoveries to produce a high quality 6% spodumene concentrate, with low iron content, similar to SGML's concentrate from GDC.
- Galvani recovery of 82.5% and Bandeira of ~78%; low iron content of 0.51% at Galvani and 0.24% at Bandeira.
- Tests were based on two 20 kg samples grading 1.62% (Bandeira) and 1.69% (Galvani) for a grind size of 12.5 mm (vs SGML target grind size of 9.5 mm).
- Tests conducted by SGS Geosol in Vespasiano, Brazil, one of the country's most distinguished research laboratories.
- Management looking to further improve recoveries through flotation testing for fines.
- Further metallurgical test work, including a pilot plant circuit using industrial dense media separator (DMS), will be undertaken by SGS Geosol in the coming months. We note that HLS tests provide a more controlled environment vs DMS which is conducted at a commercial scale. As a result, it is common for metallurgical recoveries to decline in DMS testing (more reflective of achievable recoveries during commercial production vs HLS).

Figure 7: Salinas – Strategic Location



Source: Company Reports

3. Salinas: Located Next to Colina's 13.3 Mt Resource

- Recently, LTH announced the acquisition of Neolit Minerals, a pvt. Brazilian company that owns interest in 5,713 ha of tenements, including a claim called Salinas which is directly adjacent to the Colina Lithium deposit (13.3 Mt at 1.2% Li₂O) owned by Latin Resources (LRS-ASX, mkt cap of ~A\$240 MM).
- The acquisition expanded the total land holdings for LTH to ~14,200 ha.
- Salinas claims are ~100 km north of LTH's flagship Bandeira & Galvani projects.

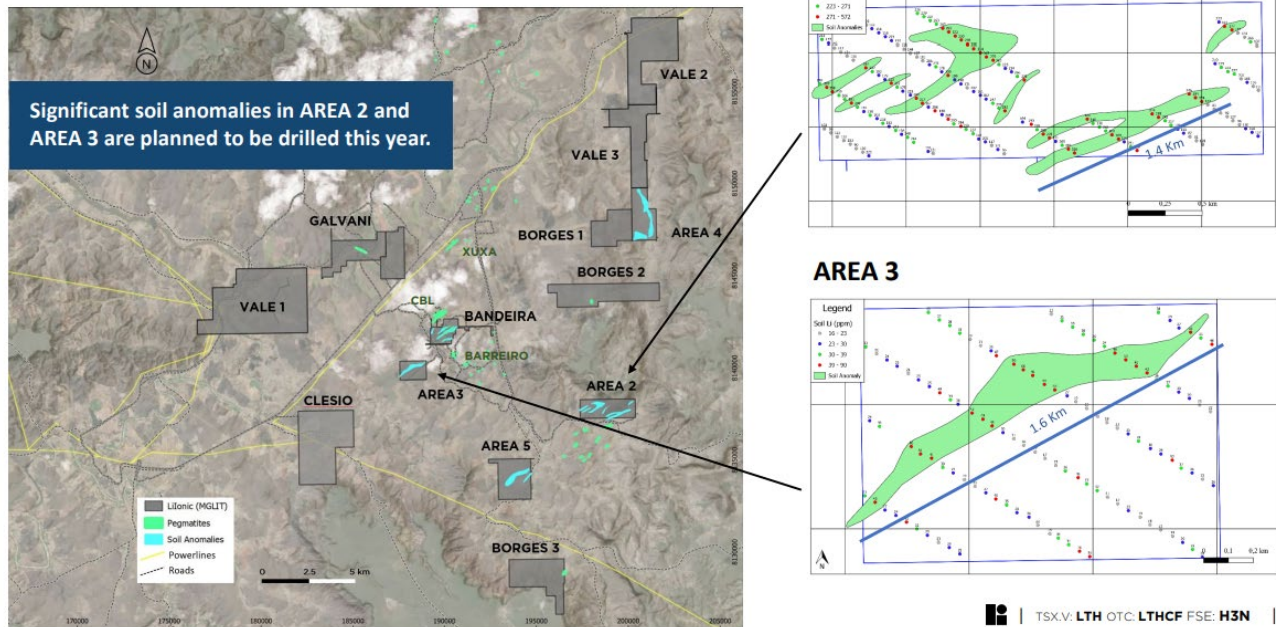
- **We think LTH should be able to swiftly build tonnage at Salinas, comparable in size to that at Colina (LRS):**
 - Colina's current ~13 Mt resource is defined over just 1 km strike length, in relatively flat lying stacked parallel veins that are 10 – 20 m thick on average.
 - Mapping, soil geochem at Salinas has identified 5+ lithium pegmatites outcropping at surface with widths of 7 – 14 m, grading 1.1% - 1.7% Li₂O – totaling ~3.5 km of potential strike.
 - Drilling by original vendor has demonstrated comparable grades and widths to Colina, incl. 1.53% Li₂O over 11.36 m; 1.22% Li₂O over 13.76 m, 1.71% Li₂O over 9.82 m.
 - The drill program confirmed several of the 5 outcrops and tested up to 500 m of strike at the Oeste Zone (one of the 5 outcrop targets). We note that mapping and sampling of outcrops indicates that the actual strike length could be multiples of the drill tested strike length to date.
 - A total of 24 holes or 4,000 m of drilling was completed by the vendor, with a wtd. avg. grade of 1.2% Li₂O at relatively shallow depths – possibly Li is leached close to surface and the grade gets better at depth; this needs to be confirmed in future with deeper drilling.
 - LTH plans to initiate a 20,000 m (~\$3.5 - \$4.5 MM, Clarus est.) drill program at Salinas over the coming months, deploying 2 – 3 rigs. Soil sampling has already started. We note that LRS's current resource at Colina was based on just 10,528 m of drilling completed over ~10 months. Essentially, at the end of the 20,000 m drill program LTH could add a comparable resource to LRS's Colina deposit that the market values at +A\$250 MM.
- Neolit owns 40% interest in the Salinas project and has the right to acquire up to 85% ownership in the project by spending an additional US\$3 MM on exploration at the claims. We note that LTH management plans to negotiate on terms for owning 100% of the Salinas project with updates expected in the future. Neolit is also in the process of acquiring a binding option to acquire up to a 95% ownership interest in another exploration tenement covering 184 ha which is contiguous with the Salinas Project.
- Terms of the transaction: Total cash payment of US\$6 MM: \$4.5 MM on closing & \$1.5 MM post 18 months of closing; 4 MM LTH shares on closing; 1.5 MM LTH share purchase warrants at C\$2.25 strike that will vest only if LTH establishes a 20 Mt at at-least 1.3% Li₂O resource.

4. Further Optionality from the Large Land Package

Beyond Galvani, Bandeira & Salinas, we note that the LTH's large land package offers further optionality with a number of spodumene-bearing pegmatites identified.

Figure 8: Salinas – Strategic Location

AREA 2 & AREA 3



Source: Company Reports

Valuation

Our 12-month target price of \$6.25 per share is based on a 1.0x multiple to our estimated fully funded corporate NAV that includes a DCF for Galvani Small-Scale mine at C\$476 MM or C\$3.37/share and in-situ valuation of C\$408 MM or C\$2.88/share. We have assumed a combined resource (Galvani & Bandeira) of 15 Mt at 1.5% Li₂O with 1.25 Mt comprised in the Galvani Small-Scale mine and the remaining ~13.8 Mt (Galvani & Bandeira) in in-situ valuation. Our fully funded NAV assumes a 60%/40% debt/equity assumption for funding the initial capex, accounting for C\$20 MM in debt in corporate adjustments and an equity dilution of 4.4 MM shares.

Galvani Small-Scale Underground Mine: Our modelling assumptions are presented in Figure 10. We are using a higher discount rate (vs 10% typical for lithium projects) to account for the lack of independently assessed mineral resources and mine plan for Galvani Small-Scale project. A breakdown of our discount rate assumption is presented in Figure 9.

In-Situ Valuation: This accounts for the resources not included in the mine model. We have assumed an in-situ valuation of C\$800/t LCE, which is a >20% discount to the average for emerging producers.

Figure 9: Clarus Discount Rate Assumption for Galvani Small-Scale Mine Model DCF

	Discount Rate	NPV (C\$ MM)
Clarus Development Asset Risk for lithium projects	10.0%	\$555
Resource delineation risk (no compliant resource currently)	2.0%	-\$34
Mine plan risk (vs Clarus assumption)	1.0%	-\$16
Execution risk (building a development team; execution/timeline risk)	1.0%	-\$15
Metallurgical/concentrate quality (DMS tests not yet conducted)	0.5%	-\$7
Off-take agreement	0.5%	-\$7
Net Discount Rate	15.0%	\$476

Source: Clarus Securities Inc.

Figure 10: Galvani Small-Scale Mine Model – Clarus Assumptions & Estimates

Galvani Small-Scale Underground Mine Model						
Clarus Assumptions & Estimates						
Production Start		H2/2024				
Clarus Price Deck SC6%		2024E	2025E	2026E	2027E	2028E
US\$/t SC6%		\$4,800	\$4,875	\$4,850	\$4,300	\$2,925
Mineable Inventory						
Ore	Mt	1.25	Mine Life		4.25 yrs	
Grade	Li2O %	1.50%	Tax rate under Sudene Program		6.25%	
Contained Spodume SC6%	kt SC6%	312.5	Royalty		2.00%	
Production						
Throughput (fully-ramped up)	kt / year	300	Costs		Total operating costs US\$/t processed \$138	
Metallurgical Recovery	%	62.5%	Total Cash Cost		US\$/t SC6% \$972	
Production (fully-ramped up)	kt SC6% / year	47	AISC		US\$/t SC6% \$1,066	
Valuation						
NPV 15%	C\$ MM	\$476	Capex		Initial Capex US\$ MM \$25	
NPV 15%	C\$/share	\$3.37	LOM Sustaining Capex		US\$ MM \$18	

Source: Clarus Securities Inc.

Figure 11: LTH – Clarus Target Price

NET ASSET VALUE				Discount rate	C\$ MM	C\$/share
Asset NAV						
Galvani Small-Scale (100.0%), Brazil				15%	\$476	\$3.37
Asset NAV Sub-Total					\$476	\$3.37
Target Setting Multiple on Asset NAV				1.00x	\$476	\$3.37
In-Situ Valuation						
	Mt	Li ₂ O Grade	LCE			
Galvani & Bandeira	13.8	1.50%	0.5 Mt	@ C\$800 /t	\$408	\$2.88
Other					-	-
In-situ Valuation Sub-total					\$408	\$2.88
Corporate Adjustments						
Current Cash					\$20	\$0.14
Value of ITM Instruments					\$14	\$0.10
Long-term Debt					-\$20	-\$0.14
Corporate Adjustments Sub-total					\$14	\$0.10
Total Corporate NAV (50% wt.)				C\$	\$898	\$6.36
Target Price				C\$/share		\$6.25

Source: Clarus Securities Inc.

We note that execution on milestones, including resource delineation and progress towards development at Galvani will see us bring our discount rate and in-situ valuation in line with that of peers, resulting in a conceptual NAV of C\$7.73/share.

Peer Comparison – Poised for a Re-rating

- Given its near-term producer status, we compare LTH to the emerging producer group for the hard rock lithium miners.
- LTH is currently trading at C\$418/t on EV/Resource (LCE) and 0.33x P/NAV (Clarus est.) or a ~60% discount to emerging producer peers trading at an average of ~C\$1,020/t and 0.84x, respectively.
- We further highlight the significant discount to Patriot Battery Metals (PMET-TSX.V; NR) that is advancing its exploration project, Corvette, in Quebec and trading at a mkt. cap of ~C\$1.0 Bn supported by recent strong intercepts incl. 156.9 m at 2.12% Li₂O.
- While LTH, at a market cap of ~C\$250 MM or ~75% discount to PMET, will be in production and free cash flowing in 2024, PMET, despite its excellent drill intercepts from Corvette, is unlikely to be permitted for production over the next several years.
- We expect LTH to be strongly re-rated towards the emerging producer peers group as mgmt. delivers on development milestones over the course of 2023, incl. the maiden resource in Q2/23 (15 – 20 Mt at ~1.5% Li₂O).

Figure 12: LTH Comps

Hard Rock Lithium Comps													VALUATION			
Company	Ticker	Share Price (Local)	Mkt. Cap. (C\$MM)	EV (C\$MM)	Project	Type	Location	Stage	Attri. kt LCE	Resource Attri. kt Li ₂ O	Grade Li ₂ O %	Prod. Attri. kt LCE/yr	EV / Resource		P/NAV	
													EV/t (C\$/LCE)	EV/t (C\$/Li ₂ O %)		
EXPLORERS																
Atlas Lithium Corp	ATLX-NASDAQ	13.55	\$131	\$122	Minas Gerais	SC	Brazil	Expl.	NA	NA	NA	NA	NA	NA	NA	NA
Latin Resources Ltd	LRS-ASX	0.11	\$221	\$191	Salinas	SC	Brazil	Expl.	394	160	1.2%	NA	\$484	\$1,196	NA	NA
Patriot Battery Metals Inc	PMET-TSX.V	11.20	\$1,023	\$1,003	Corvette	SC	Quebec	Expl.	NA	NA	NA	NA	NA	NA	NA	0.97x
International Lithium Corp	ILC-TSX.V	0.06	\$15	\$6	Raleigh Lake	SC	Ontario	Expl.	NA	NA	NA	NA	NA	NA	NA	NA
Essential Metals Ltd	ESS-ASX	0.47	\$115	\$106	Dome North	SC	Australia	Expl.	335	136	1.21%	NA	\$316	\$780	NA	NA
Global Lithium Resources Ltd	GL1-ASX	1.29	\$250	\$179	Marble, Manna	SC	Australia	Expl.	482	195	1.10%	NA	\$371	\$917	NA	NA
Group Average			\$292	\$268					404	163	1.16%	NA	\$390	\$964	0.97x	
DEVELOPERS																
Atlantic Lithium Ltd	ALLA-LSE	0.27	\$272	\$254	Ewoyaa	SC	Ghana	PEA	795	322	1.27%	22	\$320	\$790	0.57x	
Leo Lithium Ltd	LLL-ASX	0.46	\$413	\$337	Goulamina	SC	Mali	DFS	1,934	783	1.45%	108	\$174	\$431	0.24x	
Frontier Lithium Inc	FL-TSX.V	2.10	\$473	\$443	PAK	SC, Int.	Ontario	PEA	1,594	645	1.54%	23	\$278	\$686	0.44x	
Rock Tech Lithium Inc	RCK-TSX.V	2.47	\$239	\$198	Georgia, Guben	SC, Conv.	ON; Germany	PEA/Eng.	357	144	1.09%	33	\$557	\$1,375	0.55x	
Group Average			\$349	\$308					1,170	474	1.42%	47	\$332	\$820	0.45x	
EMERGING PRODUCERS																
AVZ Minerals Ltd	AVZ-ASX	0.78	\$2,507	\$2,454	Manona	SC	DRC (Congo)	DFS	12,257	4,962	1.65%	78	\$200	\$495	0.78x	
Critical Elements Lithium Corp	CRE-TSX.V	2.47	\$538	\$506	Rose	SC	Quebec	FS	826	335	0.98%	37	\$612	\$1,513	0.54x	
Sigma Lithium Corp	SGML-TSX.V	46.99	\$5,038	\$4,953	GDC	SC	Brazil	Constr.	2,904	1,176	1.43%	104	\$1,706	\$4,213	0.99x	
Sayona Mining Ltd	SYA-ASX	0.22	\$1,777	\$1,685	Multiple	SC	Quebec	Permt.	2,428	983	1.05%	38	\$694	\$1,714	1.10x	
Piedmont Lithium Inc	PLL-NASDAQ	54.73	\$1,445	\$1,311	Multiple	SC, Int.	USA, Ghana	Permt.	2,420	980	1.09%	91	\$542	\$1,338	NA	
Liontown Resources Ltd	LTR-ASX	1.53	\$3,054	\$2,699	Kathleen	SC	Australia	Constr.	5,394	2,184	1.40%	85	\$500	\$1,236	0.66x	
Core Lithium Ltd	CXO-ASX	0.83	\$1,394	\$1,274	Finniss	SC	Australia	Constr.	616	249	1.32%	24	\$2,068	\$5,109	0.89x	
Group Average			\$2,250	\$2,126					3,835	1,553	1.44%	65	\$1,020	\$2,520	0.84x	
Lithium Ionic Corp	LTH-TSX.V	2.08	\$252	\$232	Galvani	SC	Brazil	Expl.	556	225	1.50%	7	\$418	\$1,033	0.33x	

Note:

- LTH resource based on Clarus assumption of 15 Mt at 1.5% Li₂O;
- Emerging Producer Group Average Valuation excludes AVZ Minerals that is facing unresolved mining license issues in the DRC

Source: Refinitiv Eikon; Company Reports; Clarus Securities Inc.

Capital Structure

Figure 13: LTH – Current Capital Structure & Shareholder Distribution

Lithium Ionic Corp.		
Capital Structure		
Ticker Symbol		LTH-TSX.V
52 week range	C\$/share	\$3.01 / \$0.7
Basic S/O	MM	117
Basic S/O (pro-forma post Neolit acquisition)	MM	121
Warrants (Total / ITM)	MM	4.1 MM / 4.1 MM
Options (Total / ITM)	MM	11.7 MM / 11.5 MM
Fully Diluted S/O	MM	133.8
Fully Diluted S/O (ITM)	MM	132.9

Source: Company Reports; Refinitiv Eikon

Conclusion & Recommendation

We think Brazil will emerge as a 'green lithium' powerhouse over the coming years. The Eastern Pegmatite Province belt, one of the largest lithium-spodumene belts, globally, is primarily located in Minas Gerais, a state with an extensive history of mining, substantial infrastructure, cheap and green hydropower and home to the near-term producing (Q2/23) Sigma Lithium's Groto do Cirilo (GDC) project that is expected to become one of the largest lithium hard rock mines in the world by 2024.

Lithium Ionic owns ~14,200 ha of claims that are strategically located in Minas Gerais, next to a producing mine (CBL; 36k tpy of SC5.5%) and SGML's GDC project (86 Mt at 1.43% Li₂O global resource) as well as next to Latin Resources' Colina deposit (13.3 Mt at 1.2% Li₂O global resource). Lithium Ionic has completed ~25,000 m of drilling to date since April 2022, primarily focusing on the Galvani & Bandeira claims, and we think the Company is well positioned to deliver a sizeable, 15 – 20 Mt at ~1.5% Li₂O resource in Q2/23.

While we see exploration upside to drive significant resource growth beyond the maiden resource, in our opinion, what really distinguishes LTH from its peers is its potential to be in production at Galvani over the next 12 months and generating ~US\$170 MM/yr in FCF once fully ramped up by 2025. We think the market is not fully appreciating and valuing the production opportunity at Galvani that will allow LTH to hit the elevated lithium price window, well ahead of the majority of the explorer/developer peers, particularly peers in Canada that face a lengthy permitting process.

In addition, the FCF from Galvani could fund the development of a full-scale operation on the 15 – 20 Mt resource that may support economics comparable to that of SGML's +US\$2.0 Bn NPV for Phase 1 only that was based on 11.8 Mt. The opportunity for over-a-billion dollar NPV project could be confirmed in the PFS expected in early Q4/23 and is currently accounted for in the in-situ component of our valuation at C\$408 MM, indicating potential for material upside beyond our current target price.

We believe the stock, currently trading at a ~60% discount to emerging producer peers, will re-rate strongly as mgmt. delivers on development milestones over the course of 2023.

We are initiating coverage of Lithium Ionic with a **SPECULATIVE BUY** rating and a target price of **\$6.25** per share based on 1.0x NAV15% (Clarus est.).

Catalysts – Reiterated

1. Drill results from the ongoing 30,000 m program at Galvani, Bandeira – Ongoing;
2. Galvani, Bandeira Resource Update (expect 15 – 20 Mt at ~1.5% Li₂O) – Q2/23;
3. Pre-Feasibility Study (PFS) on full-scale operation – early Q3/23;
4. Galvani Small-Scale mine plan and permit application submission – September 2023;
5. Galvani Small-Scale permit approval – Year-end 2023;
6. EIA submission (baseline studies initiated) for full-scale operating permit – Year-end 2023;
7. Galvani Small-Scale production – H2/2024 (Clarus est.);
8. Full-scale permitting approval expected – Year-end 2024.

Management & Board

Blake Hylands, CEO, Director: Blake is a Professional Geoscientist with more than a decade of exploration experience, managing large teams in Canada and internationally, incl. South America & Europe, on both advanced and early-stage projects. He is the co-founder of Troilus Gold Corp. (TLG-TSX; NR; mkt cap. ~C\$150 MM). Blake led the Troilus technical team that discovered >8MM oz AuEq om northern Quebec. He has held numerous board positions for junior mining companies and has extensive professional experience in capital markets as well as in community outreach and communications with First Nations.

Hélio Diniz, President, Director: Hélio has 40 years of experience in mining and exploration activities. He has served as MD for Brazil Potash Corp. since July 2009. At the start of his career, he was involved in the evaluation and development of the Sao Bento gold mine in Brazil currently operated by Eldorado Gold Corp. He then went on to work for Xstrata (now Glencore) as Managing Director Brazil during which he discovered the world class Araguaia Nickel Deposit (over 100 million tonnes, 1.5% Ni). He then went on to set up several companies, such as Falcon Metais and HDX Consultoria, as an entrepreneur to identify, explore and develop mining opportunities in Brazil.

Carlos Costa, VP Exploration: Carlos has 29 years of experience in base metals, gold and PGE exploration throughout Brazil, including 10 years of experience in mine geology, incl. underground and open pit operations. He has worked as Country Manager, Brazil, for multiple companies, including Belo Sun, Xstrata (formerly Falconbridge). He Also worked for Vale and BP Mineração (British Petroleum Group).

André Guimarães, VP Corporate Development: André has a PhD in igneous petrology and founded Neolit Mineral in early 2020 and confirmed the discovery of compelling spodumene bearing pegmatites at Salinas. He has been directly involved in all corporate and exploration activities, including field work and contract negotiations. He has also acquired extensive experience dealing with the necessary social-related foundational work required for the development of a mining site.

David Gower, Director: David has held Executive and Director positions with several junior and mid-size mining companies for the past 12 years, incl. CEO and Director of Emerita Resources (EMO-TSX.V; Speculative Buy; \$4.00), President of Brazil Potash Corp and on the board of multiple mining companies.

David spent over 20 years with Falconbridge (now Glencore) as Director of Global Nickel and PGM exploration and as a member of the senior operating team.

In addition, the board also includes Patrizia Ferrarese, Lawrence Guy & Michael Shuh as Directors.

Investment Risks

Geologic & Engineering Risk: Our modelled lithium resources and grades for Galvani & Bandeira are not based on an independently assessed NI-43 101 report. Our estimates for DCF of mine model at Galvani Small-Scale are not based on engineering studies and may be different from estimates published by the company in the future. Lowering our modeled grade and or lithium resources would adversely impact our target price. Our modeled operating & capital cost assumptions are not based on engineering studies and may differ from future guidance/reports published by the company.

Currency & Commodity Price Risk: One of the key risks facing the Company is the fluctuations in commodity prices, particularly the price of lithium products such as spodumene concentrate. The Company is also exposed to the USD-Brazilian Real exchange rate fluctuations. We also note that high inflation could adversely affect the Company's cost profile and lower margins and cash flows assumed in our Galvani Small-Scale mine model.

Financing Risk: The Company currently does not generate revenue and we believe it will need funding to advance towards production. The Company faces the risk that additional equity or debt financing may not be available at any given time or at favourable terms.

Development, Execution & Operational Risk: Mining operations could be negatively impacted by: mechanical equipment failures, pit-wall slippage, rock bursts, and other operational issues. Such issues may result in slippage on operational performance vs our estimates that could adversely impact our cash flow estimates, and, in turn, our target price.

Permitting Risk: The Company faces the risk that permits are not issued for its projects or are not issued in a timely manner. We believe that these risks are mitigated by the management's plan to advance Galvani towards production as an underground mine and at a small scale which has limited environmental footprint and does not require a full-scale EIA.

Brazil Political Risk: The Company faces the risk that Brazilian government may make changes to laws and regulations, which adversely affect the Company. We note the return of the left-leaning Luiz Inácio Lula da Silva to Brazil's presidency in January. We highlight that he was also the president of the country during the commodities boom in 2002 and governed capably, driving the country out of a recession.

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Buy: Attractively valued and expected to appreciate significantly from the current price over the next 12-18 months.

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