



LITHIUM – MADE IN THE USA

Helping Secure America's Energy Security

 Nasdaq :PLL

 ASX :PLL

ARBN 647 286 360

November 2022

LiOH

DISCLAIMERS

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of or as described in securities laws in the United States and Australia, including statements regarding exploration, development and construction activities of Sayona Mining, Atlantic Lithium and Piedmont Lithium; current plans for Piedmont's mineral and chemical processing projects (including its partners); projections of market demand and prices; statements about the timing and amount of reserve and resource declarations and our chemical processing operations; strategy; value; returns; capital allocation and investment; expectations regarding permitting; costs and expenses; and statements about the timing and ability to complete scoping studies and feasibility studies.

Such forward-looking statements involve substantial and known and unknown risks, uncertainties and other risk factors, many of which are beyond our control, and which may cause actual timing of events, results, performance or achievements and other factors to be materially different from the future timing of events, results, performance or achievements expressed or implied by the forward-looking statements. Such risk factors include, among others: (i) that Piedmont will be unable to commercially extract mineral deposits, (ii) that Piedmont's properties may not contain expected reserves, (iii) risks and hazards inherent in the mining business (including risks inherent in exploring, developing, constructing and operating mining projects, environmental hazards, industrial accidents, weather or geologically related conditions), (iv) uncertainty about Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required capital to execute its business plan, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to hire and retain required personnel, (vi) changes in the market prices of lithium and lithium products, (vii) changes in technology or the development of substitute products, (viii) the uncertainties inherent in exploratory, developmental and production activities, including risks relating to permitting, zoning and regulatory delays related to Piedmont's projects as well as the projects of our partners in Quebec and Ghana, (ix) uncertainties inherent in the estimation of lithium resources, (x) risks related to competition, (xi) risks related to the information, data and projections related to Sayona Mining or Atlantic Lithium, (xii) occurrences and outcomes of claims, litigation and regulatory actions, investigations and proceedings, (xiii) risks regarding our ability to achieve profitability, enter into and deliver product under supply agreements on favorable terms, our ability to obtain sufficient financing to develop and construct our projects, our ability to comply with governmental regulations and our ability to obtain necessary permits, and (xiv) other uncertainties and risk factors set out in filings made from time to time with the U.S. Securities and Exchange Commission ("SEC") and the Australian Securities Exchange, including Piedmont's most recent filings with the SEC. The forward-looking statements, projections and estimates are given only as of the date of this presentation and actual events, results, performance and achievements could vary significantly from the forward-looking statements, projections and estimates presented in this presentation. Readers are cautioned not to put undue reliance on forward-looking statements. Piedmont disclaims any intent or obligation to update publicly such forward-looking statements, projections and estimates, whether as a result of new information, future events or otherwise. Additionally, Piedmont, except as required by applicable law, undertakes no obligation to comment on analyses, expectations or statements made by third parties in respect of Piedmont, its financial or operating results or its securities.

Competent Persons Statement

The Carolina Lithium Project comprises the Project's estimated Probable Ore Reserves of 18.3 Mt @ 1.10% Li₂O and Mineral Resource estimate of 44.2Mt @ 1.08% Li₂O comprised of Indicated Mineral Resources of 28.2Mt @ 1.11% Li₂O and Inferred Mineral Resources of 15.9Mt @ 1.02% Li₂O previously reported on October 21, 2021 ("Mineral Resource update"). The information in this presentation that relates to Exploration Results, Mineral Resources, Metallurgical Testwork, Process Design, Operating Costs, Capital Costs, Financial Analysis, Mining Engineering, Mine Schedule, Mining Costs and Ore Reserves of the Carolina Lithium Project was extracted from our announcement entitled 'Piedmont Completes Bankable Feasibility Study of the Carolina Lithium Project with Positive Results' dated December 13, 2021 ("Original Announcement") which is available to view on the Company's website at www.piedmontlithium.com.

Piedmont confirms that: a) it is not aware of any new information or data that materially affects the information included in the Original Announcement; b) all material assumptions and technical parameters underpinning Mineral Resources, production targets, and related forecast financial information derived from production targets included in the Original Announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially modified from the Original Announcement.

Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Mineral Resources

The information contained herein by Piedmont for the Carolina Lithium Project has been prepared in accordance with the requirements of the securities laws in effect in the United States and Australia. The terms "ore reserves", "proven ore reserves", "probable ore reserves", "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are used herein as defined under the U.S. Securities and Exchange Commission ("SEC") in Regulation S-K, Item 1300 ("S-K 1300") or the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code").

Information presented herein related to the Mineral Resources of Sayona Quebec's Authier Project and Atlantic Lithium's Ewoyaa Project have been prepared in accordance with the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (the 'JORC Code'). Additionally, the historical Mineral Resources for North American Lithium have been prepared in accordance with the regulations of National Instrument 43-101, Standards of Disclosure for Mineral Project ("NI 43-101") in effect in Canada. The terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are terms with meaning both in the JORC Code and NI 43-101. Comparable terms are now also defined by the SEC in its newly adopted Modernization of Property Disclosures for Mining Registrants as promulgated in its S-K 1300 standards. While the guidelines for reporting mineral resources, including subcategories of measured, indicated, and inferred resources, are largely similar for JORC, NI 43-101 and S-K 1300 standards, information contained herein that describes Sayona's and Atlantic Lithium's mineral deposits are not fully comparable to similar information made public by U.S. companies subject to reporting and disclosure requirements under the U.S. federal securities laws and the rules and regulations thereunder. U.S. investors are urged to consider Piedmont's disclosure in its SEC filings, copies of which may be obtained from Piedmont or from the EDGAR system on the SEC's website at www.sec.gov.

WHY PIEDMONT?

Strong Lithium Markets

Large Spodumene Resource Base

Downstream Integration to Hydroxide

Diversification by Asset and Geography

Near-Term Cash Flow Potential

Supportive U.S. Government

CORPORATE SNAPSHOT

PIEDMONT LITHIUM



Shares / CDIs Outstanding (100 CDIs = 1 Share)	17.96 mm	1,796.4 mm
Price (@ 10/28/22)	\$61.45	A\$0.93
Average Daily Trading Volume (30-day)	\$27 mm	A\$3 mm
Market Cap (@ 10/28/22)	\$1.1 bb	A\$1.7 bb
Cash (9/30/22)	\$118 mm	A\$183 mm
Equity Interests at Market (@ 10/28/22)	\$203 mm	A\$316 mm

RESEARCH COVERAGE

B | RILEY Securities



CANACCORD Genuity

COWEN



D|A|**DAVIDSON**

EVERCORE ISI

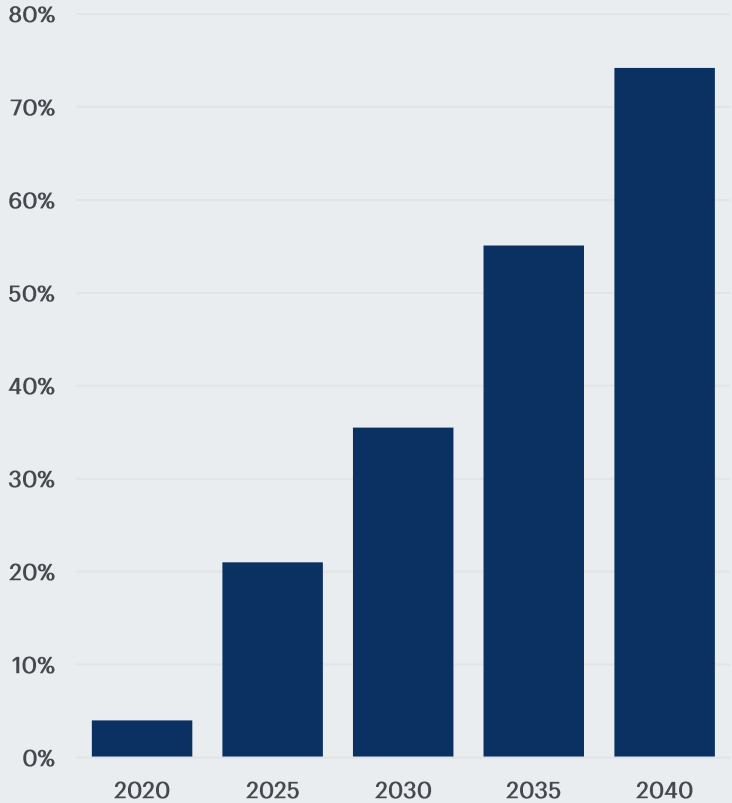


TUOHY BROTHERS
INVESTMENT RESEARCH INC.



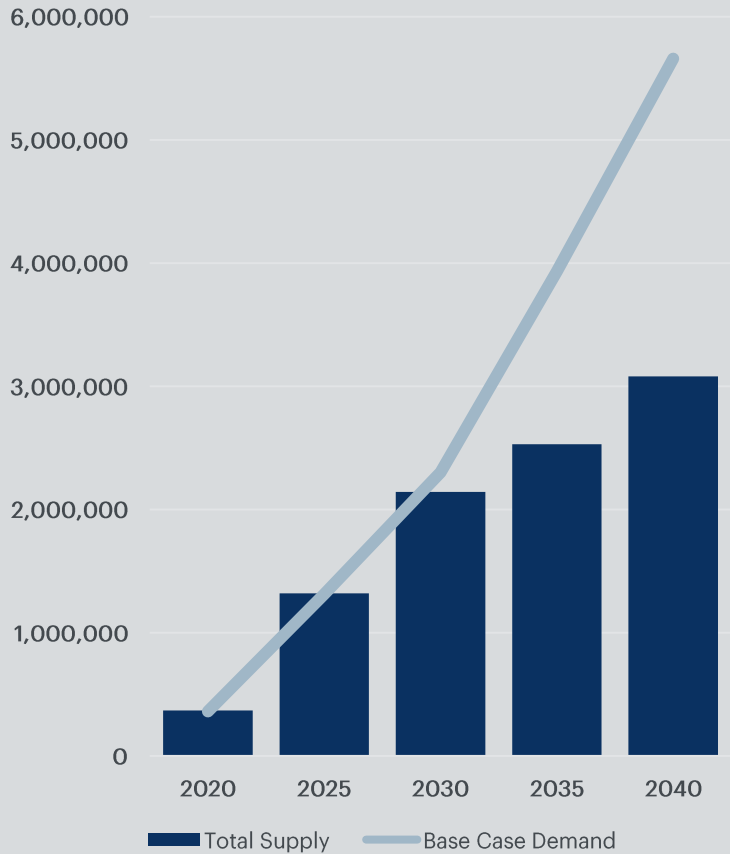
LITHIUM MARKET TRENDS

GLOBAL EV PENETRATION



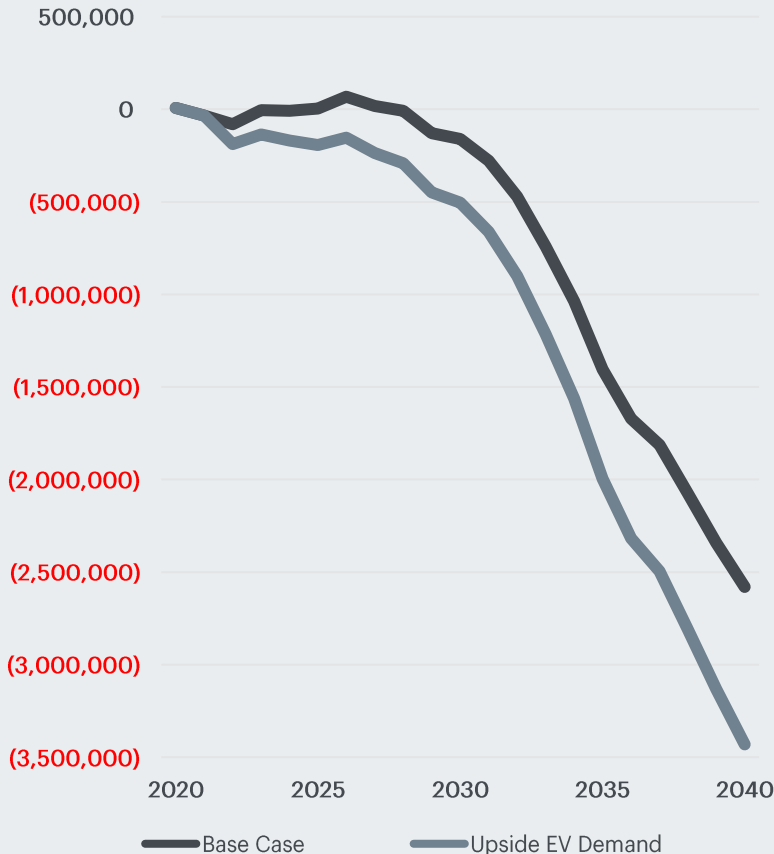
4 Source: Benchmark Mineral Intelligence – Lithium Forecast, Q3 2022

GLOBAL LITHIUM SUPPLY SHORTFALLS EXPECTED (LCE TONNES)



Source: Benchmark Mineral Intelligence – Lithium Forecast, Q3 2022

LITHIUM MARKET BALANCE (LCE TONNES)



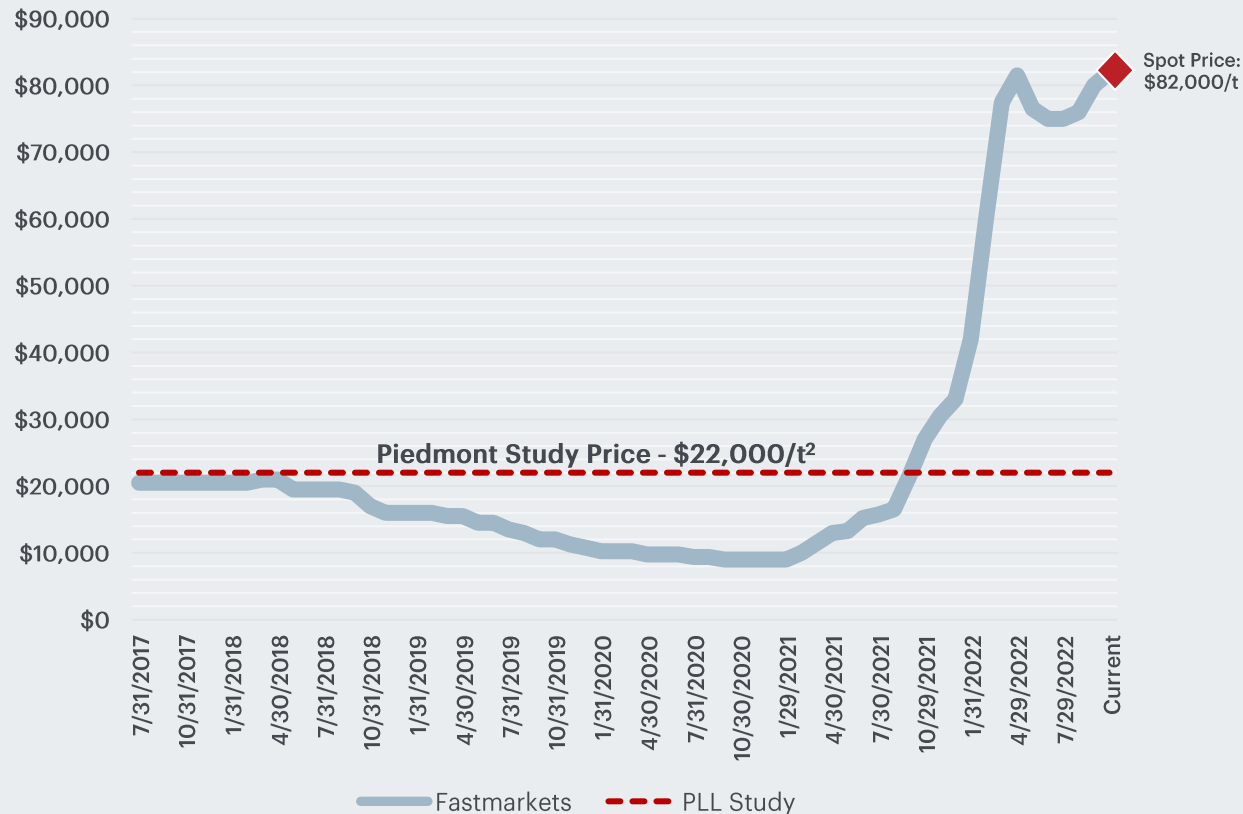
Source: Benchmark Mineral Intelligence – Lithium Forecast, Q3 2022



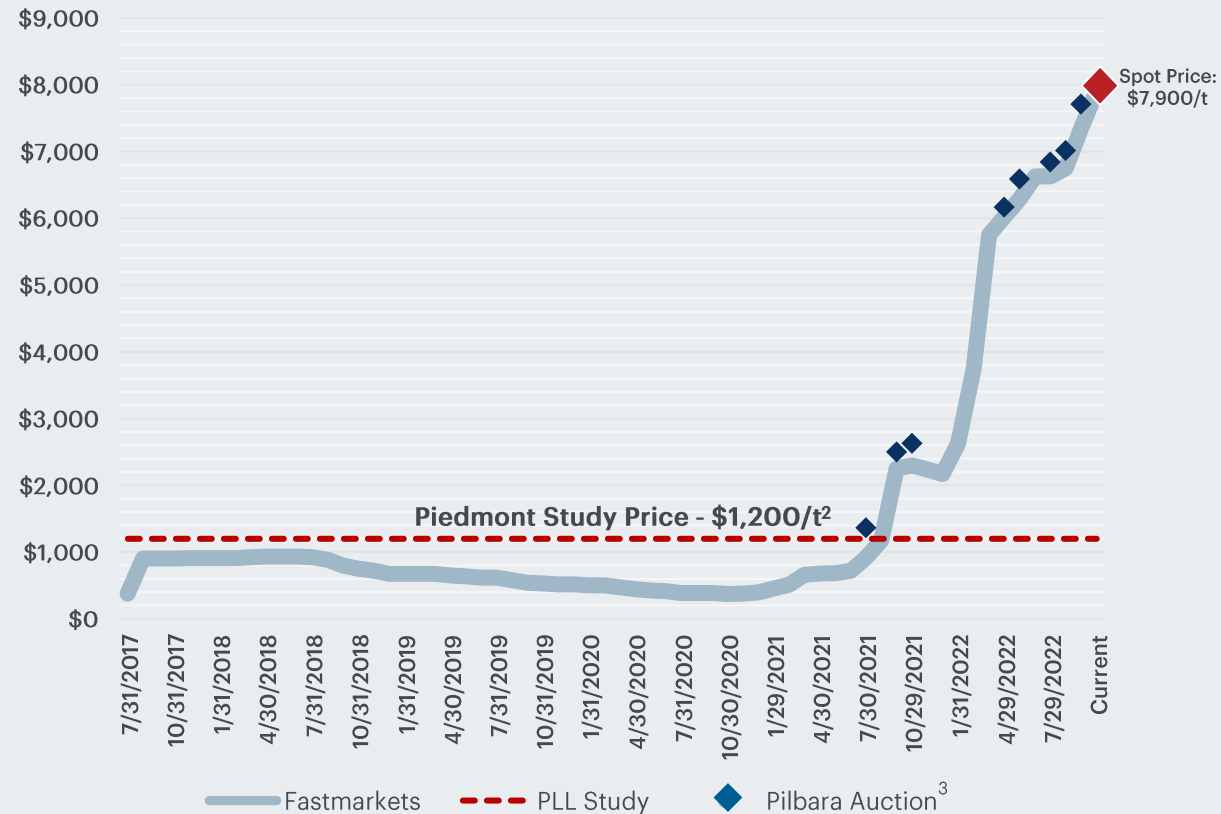
LITHIUM PRICES AT ALL-TIME HIGHS

“The long-term path for lithium is set, yet the supply chain scaling challenge has just begun” - Simon Moores, CEO Benchmark Minerals Intelligence

BATTERY GRADE LITHIUM HYDROXIDE PRICES (US\$/MT)¹



SPODUMENE CONCENTRATE 6% PRICES (US\$/MT)¹



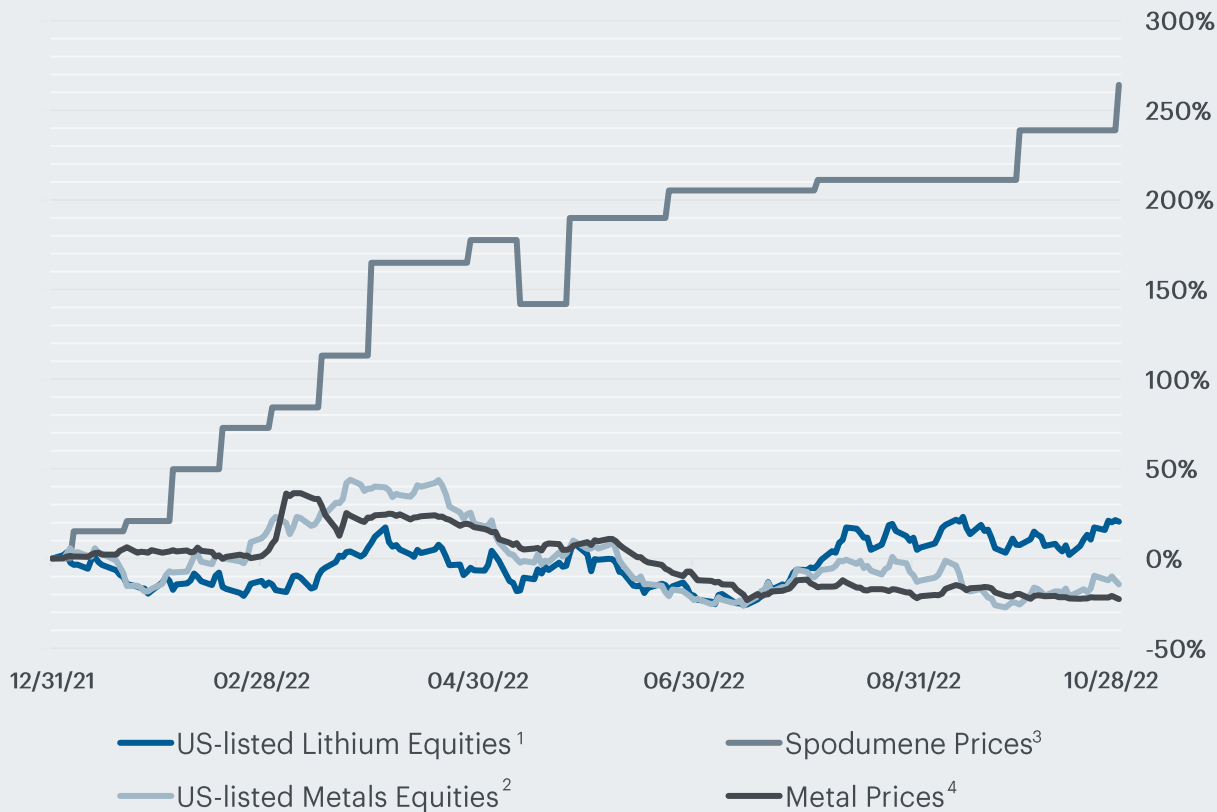
1. Historical Prices –Fastmarkets CIF China ‘mid-price’ for lithium hydroxide and spodumene 6%. Spot prices as of October 28, 2022.

2. “Piedmont Study Price” are the fixed prices assumed in the financial model developed as part of our Tennessee Lithium Preliminary Economic Assessment announced March 8, 2022

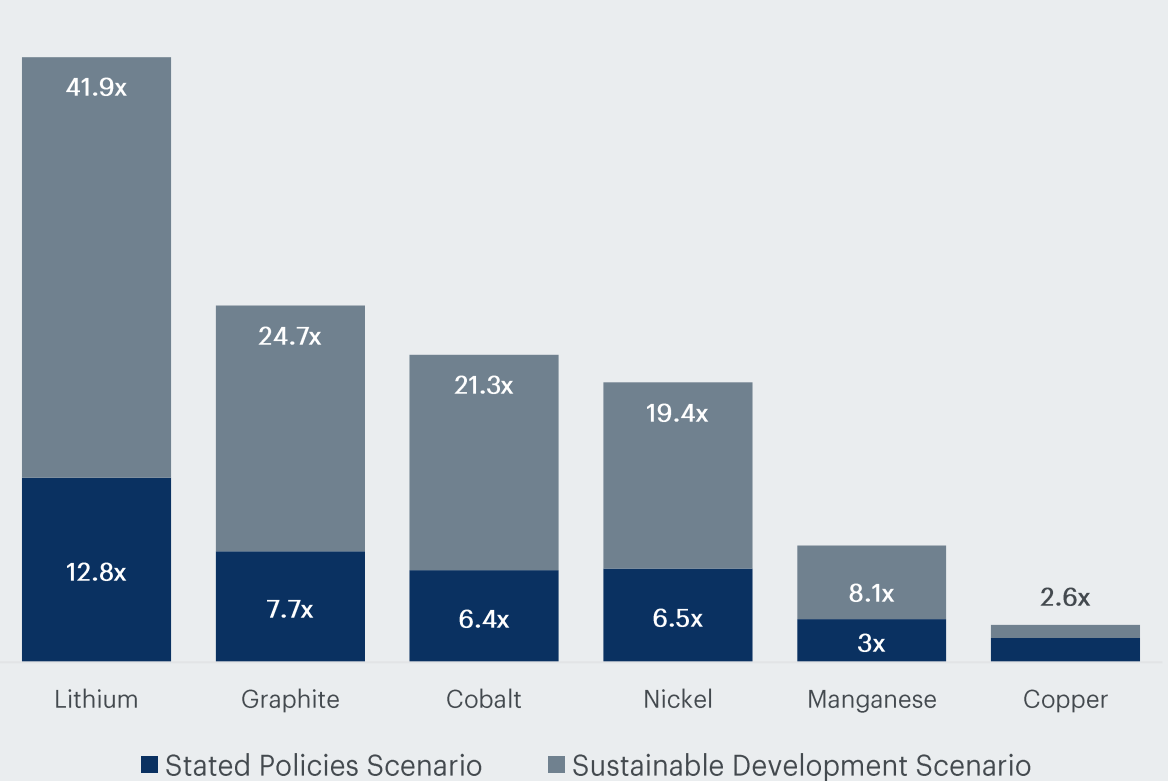
3. Pilbara Auction comes from Pilbara Minerals ASX announcements. 5.5% Spodumene BMX Prices are the result of the auction and the Implied 6.0% Spodumene Price includes adjustments for conversion and freight costs.

EQUITIES NOT REFLECTING LITHIUM PRICE PERFORMANCE

PERFORMANCE SINCE 12/31/21



GROWTH IN DEMAND FROM CLEAN ENERGY TECHNOLOGIES BY SCENARIO, 2040 RELATIVE TO 2020⁵



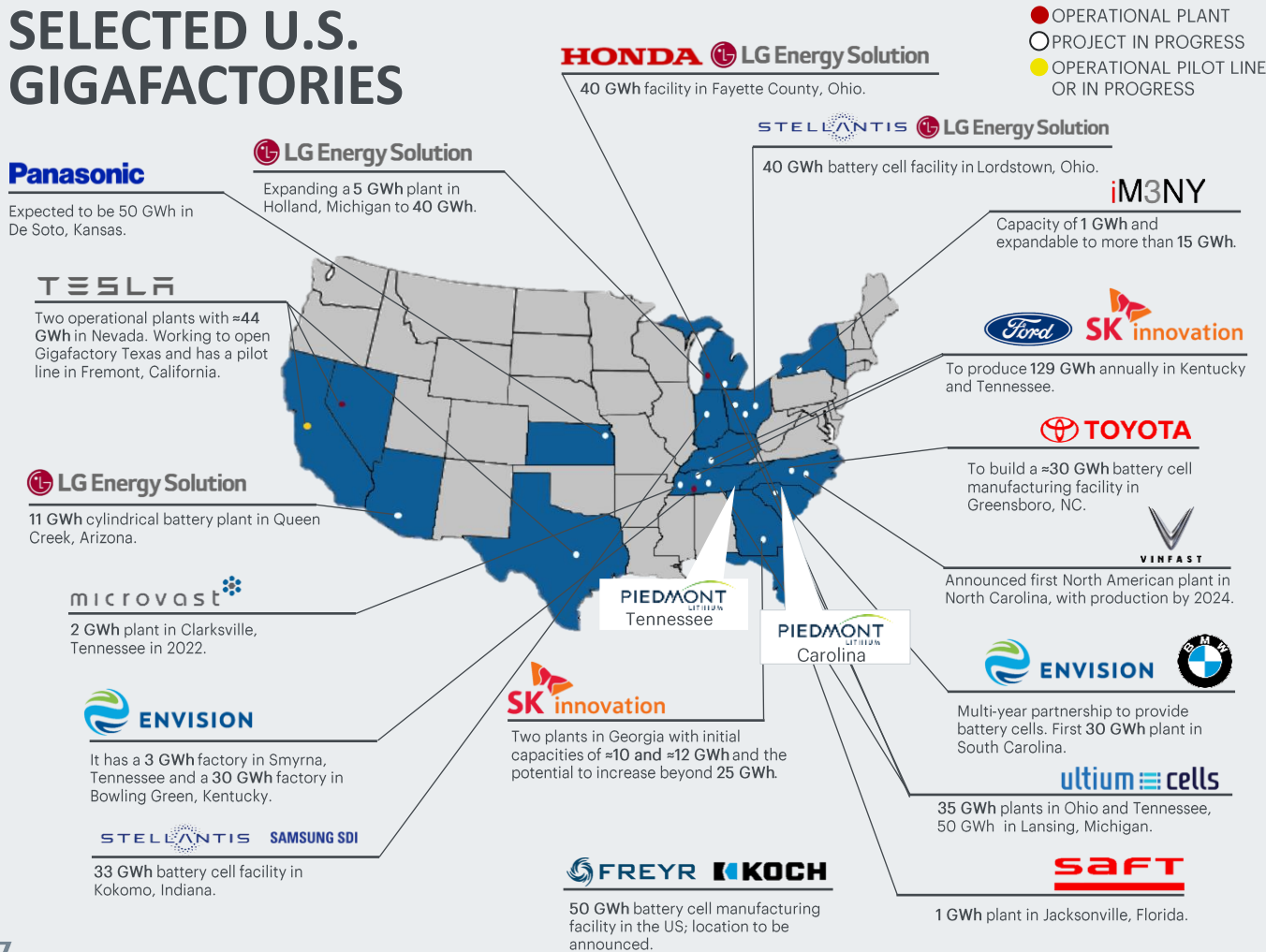
1. U.S. Listed Lithium Equities: Piedmont Lithium, Albemarle, Livent, Lithium Americas, Standard Lithium, Sigma Lithium, Ioneer and Li-Cycle
 2. U.S. Listed Metals Equities: U.S. Steel, Cleveland Cliffs, Freeport McMoRan, Nucor
 3. Spodumene Prices: Fastmarkets Spodumene 6%
 4. Metal Prices: Hot-Rolled Coil Steel, China Import Iron Ore, LME 3M Copper and LME 3M Nickel

5. Source: International Energy Agency (IEA)

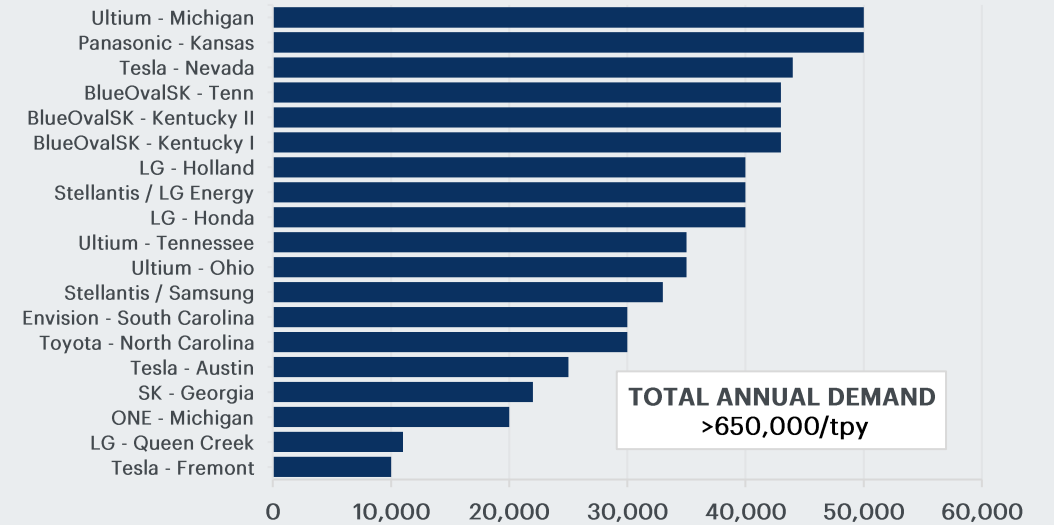
DOMESTIC SHORTFALLS ANTICIPATED¹

Commitments of Over \$60 Billion to Build U.S. Battery Capacity by 2030

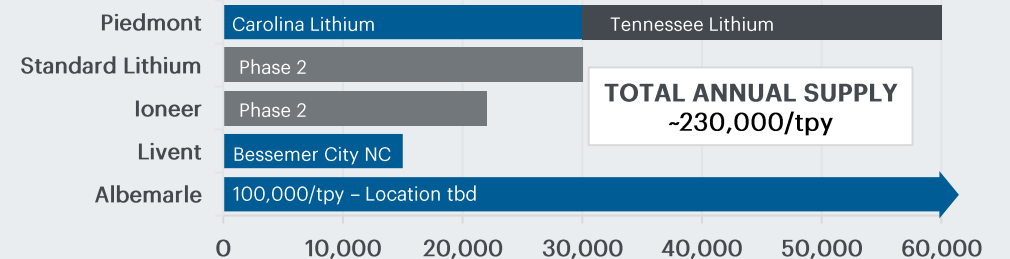
SELECTED U.S. GIGAFACTORIES



LiOH REQUIRED BY SELECTED GIGA-FACTORIES BY 2030



SELECTED US LITHIUM HYDROXIDE SUPPLY BY 2030



1. Source: Benchmark Mineral Intelligence – Lithium Forecast, Q3 2022, company announcements and Piedmont Lithium estimates

UNITED STATES GOVERNMENT POLICY

Piedmont is Well-Positioned to Benefit from America's Pro-EV Policies

DEPARTMENT OF ENERGY

Battery Materials Grant Programs
ATVM Loan Programs

- Piedmont awarded \$142mm grant for Tennessee Lithium under the Bipartisan Infrastructure Law
- Low-interest 'Advanced Technology Vehicle Manufacturing' loans
 - PLL has applied for Tennessee Lithium and Carolina Lithium

INFLATION REDUCTION ACT

Advanced Manufacturing Production Credit (45X)
Clean Vehicle Credit (30D)
Commercial Clean Vehicles (45W)

- 45X – Advanced Manufacturing Credit
 - New production tax credit equal to 10% of annual production costs
 - Available to US taxpayers with US-based critical minerals operations
- 30D – Clean Vehicle Tax Credit
 - \$7,500 credit for qualifying light vehicle purchases
 - Credit requires escalating usage of 'domestic' critical minerals (includes FTA countries)
- 45W – up to \$40,000 credit for large commercial vehicles

STATE EV MANDATES

- California and other states banning the sale of new internal combustion engine vehicles by 2035

PIEDMONT ASPIRES TO BECOME...

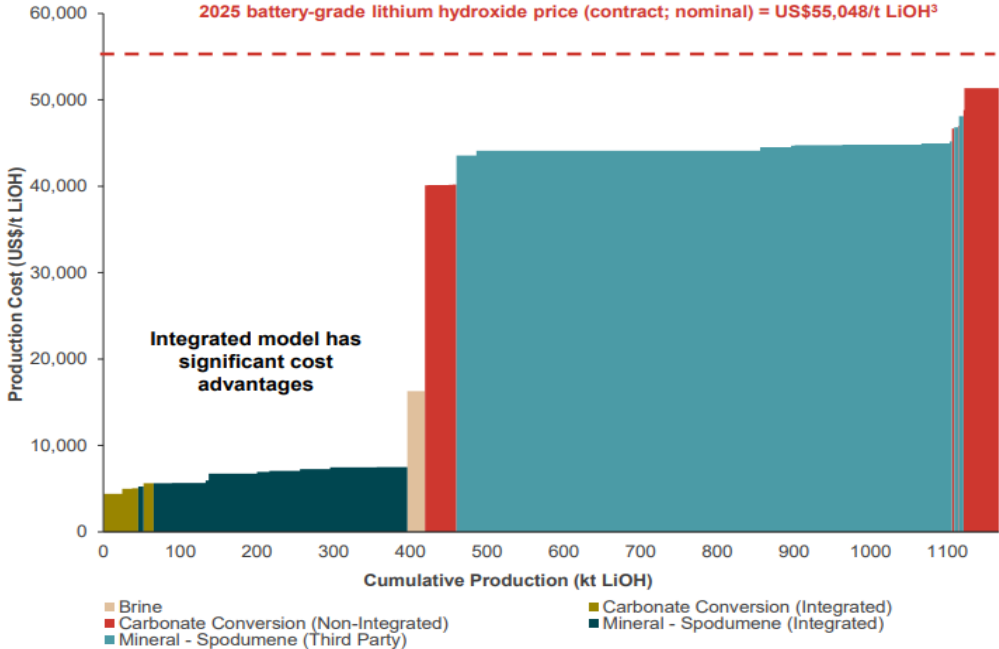
...a Leading American Producer of Lithium Hydroxide...

...Produced from Spodumene Concentrate...

...That We Own

...look at this chart here...if you're down in the black and you own rock in the ground, you're God." Chris Ellison, MD – Mineral Resources, AGM Comments 8/29/22

2025 Lithium hydroxide cost curve¹



1. Source: Mineral Resources Limited Annual Meeting Presentation, August 29, 2022

PROJECTS



QUEBEC (~35% ECONOMIC INTEREST¹)

SYQ

Project	Authier + NAL
Location	Abitibi Region, Quebec, Canada
Project Stage	Pre-Feasibility
Mineral Resources	119.1Mt @ 1.05% Li ₂ O ²
Production	168,000tpy SC6 ³
Economics	\$571mm NPV; \$80mm capex ³

GHANA (EARN-IN OF 50% PROJECT INTEREST⁴)

ALL

Project	Ewoyaa
Location	Cape Coast, Ghana
Project Stage	Pre-Feasibility
Mineral Resources	30.1Mt @ 1.26% Li ₂ O ⁵
Production	255,000tpy SC6 (50% to PLL) ⁶
Economics	\$1.3bb NPV; \$125mm capex ⁶

TENNESSEE LITHIUM (100% OWNERSHIP⁷)

TEN

Project	Tennessee Lithium
Location	McMinn County, Tennessee
Project Stage	PEA (DFS to be completed 12/22)
Production	30,000tpy LiOH
Economics	\$2.2bb NPV; \$346mm run-rate EBITDA

CAROLINA LITHIUM (100% OWNERSHIP⁸)

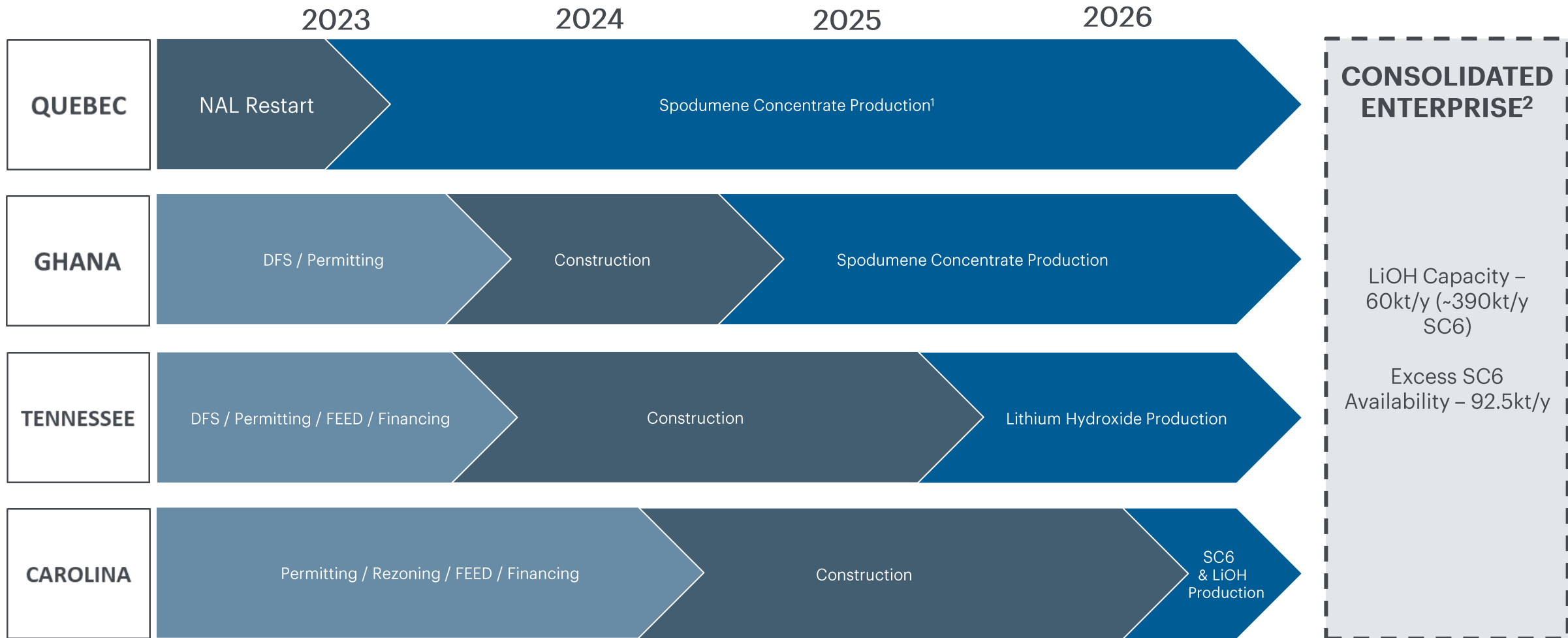
CAR

Project	Carolina Lithium
Location	Gaston County, North Carolina
Project Stage	Feasibility Study
Mineral Resources	44.2Mt @ 1.08% Li ₂ O
Production	30,000tpy LiOH; 242,000tpy SC6
Economics	\$2.8bb NPV; \$592mm run-rate EBITDA

1. Piedmont owns a 25% interest in Sayona Quebec and a 14.4% stake in Sayona Mining, resulting in an effective economic interest of ~35%.
2. Refer to Sayona Mining ASX announcement dated March 1, 2022 for JORC Code Compliant MRE.
3. Refer to Sayona Mining ASX announcement dated May 23, 2022 for results of NAL Pre-Feasibility Study.
4. Piedmont can earn a 50% interest in Atlantic Lithium's Ghanaian lithium portfolio and owns 9.4% of Atlantic Lithium.
5. Refer to Atlantic Lithium AIM announcement dated March 24, 2022 for JORC Code Compliant MRE.
6. Refer to Atlantic Lithium AIM announcement dated September 22, 2022.
7. Refer to Piedmont Lithium press release dated March 9, 2022.
8. Refer to the result of Piedmont Lithium Bankable Feasibility Study announcement dated December 14, 2021. Economics for Carolina Lithium are indicative Company estimates disclosed in the PEA dated March 9, 2022 and are not independently verified by the BFS Qualified Persons.

DEVELOPMENT PROGRESSION

Indicative Timelines - actual timelines remain subject to permitting, financing and construction.



1. Initial SC6 production from the restart of the North American Lithium mine. Potential LiOH production from Quebec is the subject of further technical studies.
 2. Figures for LiOH Capacity and Excess SC6 Availability are based on studies released by Piedmont Lithium, Sayona Mining and Atlantic Lithium covering each project. See Peer Project Notes in the appendix for pro-rata production figures.

ELEMENTS OF VALUE

Value Drivers Include Financial Assets, Project Interests and Offtake Economics

ENTERPRISE VALUE

Shares Outstanding	17,964,863
Share Price (@ 10/28/22)	\$61.45
Market Cap (@ 10/31/22)	\$1,104 mm
Cash (9/30/22)	\$118 mm
Debt (Est. 9/30/22)	<\$1 mm
SYA Shares (at Market @ 10/28/22)	\$179 mm
ALL Shares (at Market @ 10/28/22)	\$23 mm
Enterprise Value	\$785 mm

PROJECT INTERESTS¹

QUEBEC

- 25% of Sayona Quebec
- SYA market cap = \$1.3bb
- Offtake – 113,000tpy SC6 life of mine with ceiling price of \$900/t
- Offtake generates \$791mm annual EBITDA at spot SC6 price of \$7,900/t

GHANA

- Earning 50% project interest
- ALL market cap = \$235 mm
- PFS for flagship Ewoyaa Project indicated project after-tax NPV and IRR of \$1.33bb and 224%, respectively

TENNESSEE

- 100%-owned – project NPV of \$2.2bb at \$22,000/t LiOH vs. spot price of \$82,000/t
- \$832mm run-rate EBITDA at spot
- \$142mm DOE Grant announced 10/19/22

CAROLINA

- 100%-owned – project NPV of \$2.8bb at \$22,000/t LiOH vs. spot price of \$82,000/t
- \$2.6bb run-rate EBITDA at spot
- Mine permit expected H1 2023

1. See Project Notes in appendix for additional project specific disclosures.

POTENTIAL IMPACT OF SYQ OFFTAKE²

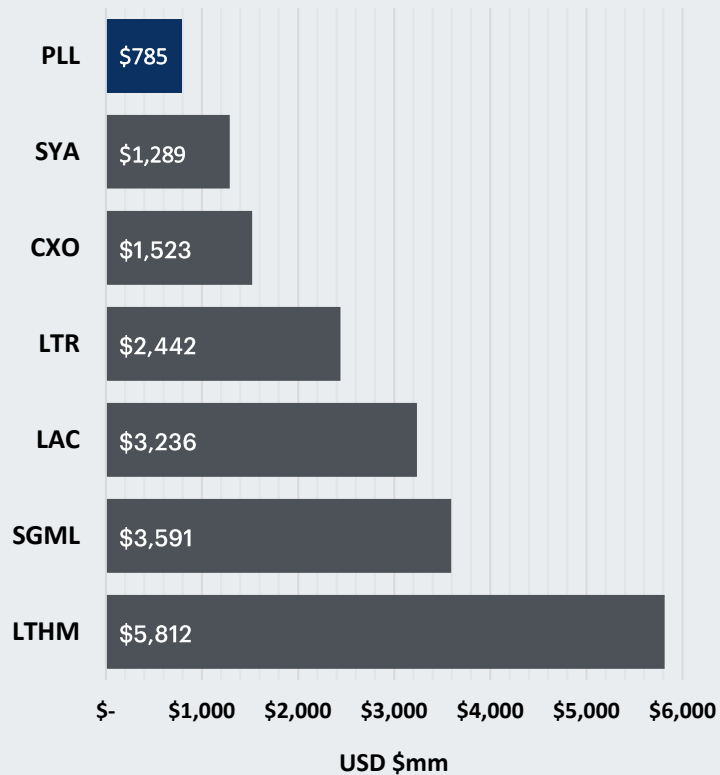


2. Illustrative EBITDA impact at various spodumene concentrate prices, assuming cash operating costs of \$590/t per North American Lithium's Pre-Feasibility Study and PLL's offtake of 113,000tpy at \$900/t. Excludes transport costs. See Project Notes in appendix for additional disclosures.

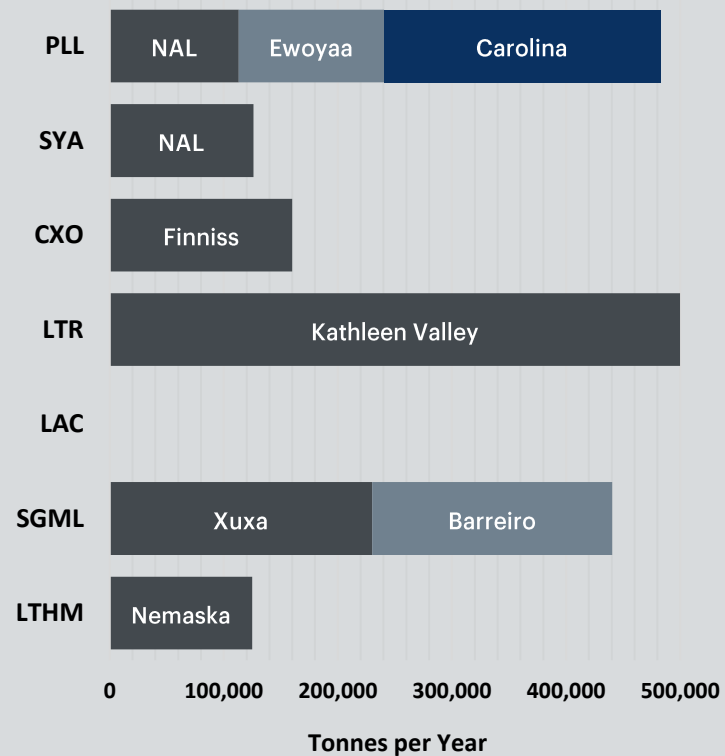
VALUATION CONSIDERATIONS

PLL Offers Scale, Diversification and Downstream Integration, With Near-term Production at NAL

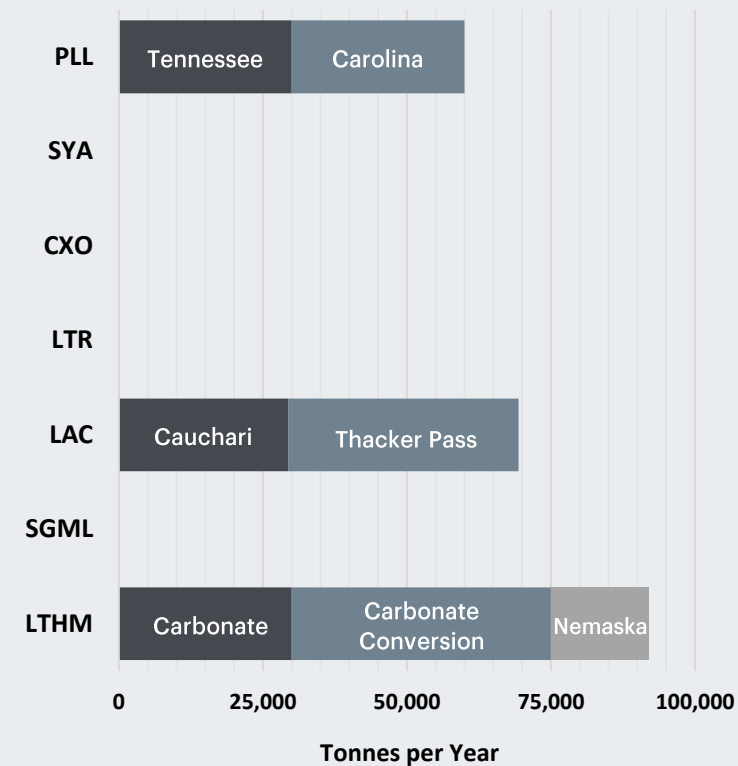
Enterprise Value¹



Annual Planned
6% Spodumene Concentrate Production²




Annual Planned
Lithium Chemical Production²



1. Enterprise Values are sourced from Nasdaq as of October 28, 2022 and shown in US\$mm.

2. See Peer Projects in the Appendix for additional disclosures. Proportional rights and offtake agreements are reflected. Note that projects for which technical studies have not been completed are excluded.

APPENDICES

 Nasdaq :PLL

 ASX :PLL

ABN 50 002 664 495

LiOH

LEADERSHIP



KEITH PHILLIPS
Chief Executive Officer

COWEN

J.P.Morgan



Patrick Brindle
Chief Operating Officer



Bruce Czachor
Chief Legal Officer



Michael White
Chief Financial Officer



Austin Devaney
Chief Commercial Officer



Kris McVey
Chief Administrative Officer



Nick Fouche
SVP, Capital Projects



Lamont Leatherman
Chief Geologist



Monique Parker
VP, Safety, Environment & Health



Erin Sanders
VP, Corporate Communications



QUEBEC

NAL Restart Targeted for H1 2023

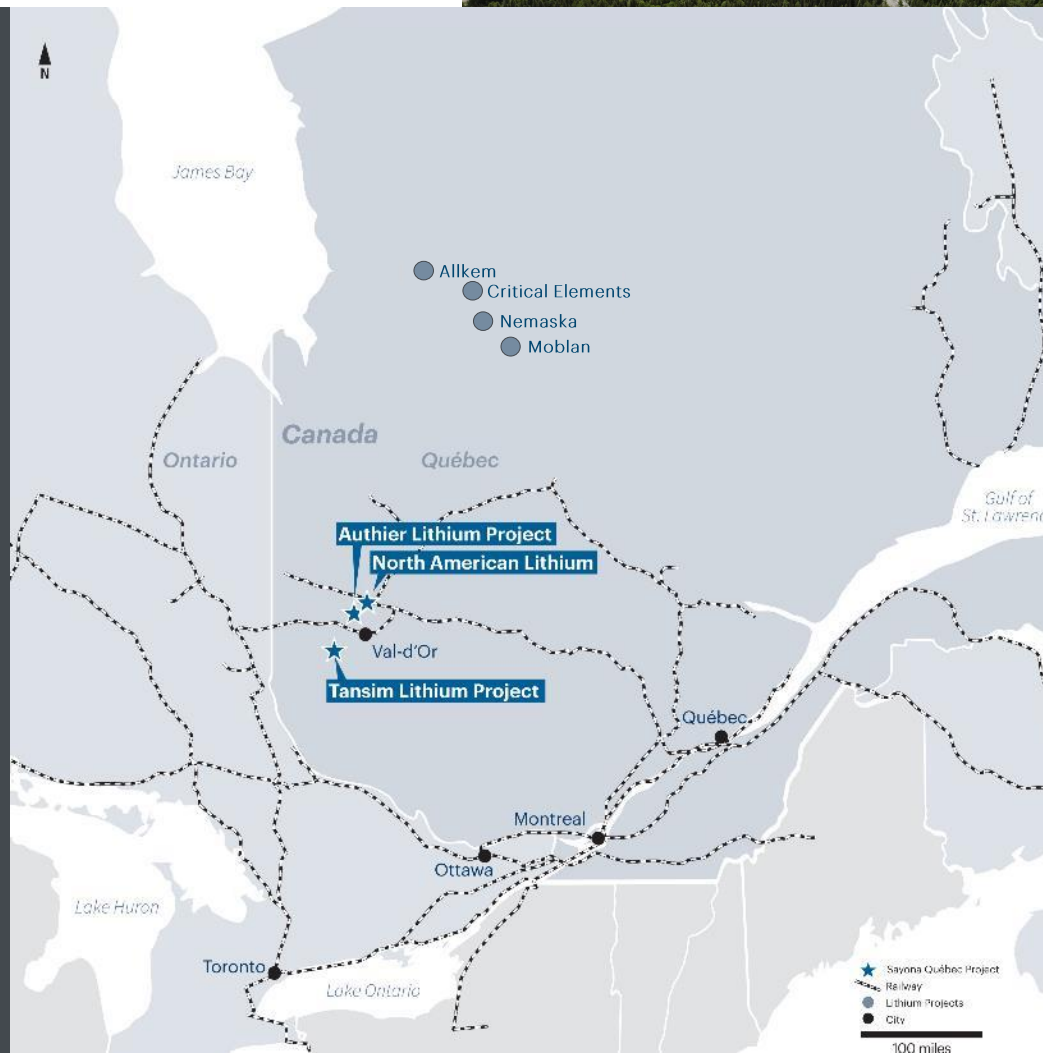


HIGHLIGHTS

- Piedmont Interest¹
 - 14.4% SYA shares = \$179mm
 - 25% of Sayona Quebec
 - SYA market cap = \$1.3bb
 - Offtake – 113,000tpy SC6 with ceiling price of \$900/t
- Among Canada’s largest and best-located lithium projects
- NAL is a past-producer with C\$400mm of capital investment
- Good road and rail access
- Skilled local labor and contractors
- Low-cost renewable hydroelectricity

UPCOMING MILESTONES

- NAL restart targeted for H1 2023
- PLL initiating offtake discussions for its share of SC6
- PFS for completion of on-site carbonate refinery to be completed in H1 2023



FACT SHEET

Location	Québec
Project Stage	Restart H1 2023
Business	Spodumene Concentrate
Resources	119.0Mt @ 1.05% Li ₂ O ²
Production	168,000tpy SC6 ³
PLL Offtake	Greater of 50% of production or 113,000tpy ⁴
Offtake Price	Price Floor: \$500/t Price Ceiling: \$900/t ⁴
Production	2023
Capex	\$80mm ³
Opex	\$590/t SC6 ³
After-tax NPV ₈	\$571mm ³

1. Piedmont owns ~1.2bb shares of Sayona Mining (ASX: SYA) and 25% of the Sayona Quebec joint venture. Market cap as of October 28, 2022.
2. Mineral Resources include JORC Code (2012) Mineral Resources of North American Lithium and Authier and are based on Sayona’s public filing on March 1, 2022.
3. See Sayona Mining ASX announcement dated May 23, 2022 for NAL pre-feasibility announcement.
4. Refer to Piedmont’s ASX announcement dated January 11, 2021 for supply agreement terms.

NAL - \$80MM RESTART INVESTMENT

Process improvements expected to improve head grade, plant availability, plant capacity and product quality



Recruited experienced operational leadership team



Improving size control in the crushing plant



Improving head grade into concentrator with additional ore sorting equipment



Crushed ore storage dome to improve overall plant availability



Eliminating excessive fines recycling in the grinding circuit



Additional magnetic separation equipment to remove iron from spodumene concentrate product



Increased product filter capacity



GHANA

Atlantic Lithium Targeting First Production in 2024



HIGHLIGHTS

- Piedmont Interest¹
 - 9.4% ALL shares = \$23mm
 - Earning 50% of Ghanaian lithium portfolio
 - ALL market cap = \$235mm
 - Offtake – 50% of life of mine production at market
- Mining-friendly jurisdiction
- ~70 miles from major port along national highway
- Efficient transport to Tennessee for hydroxide conversion
- Coarse-grained spodumene implies low capex DMS flowsheet
- Adjacent hydroelectric powerlines

UPCOMING MILESTONES

- Mineral Resource update – Q4 2022
- Definitive feasibility study – 2023



FACT SHEET

Location	Ghana
Project Stage	Pre-Feasibility
Business	Spodumene Concentrate
Resources	30.1Mt @ 1.26% Li ₂ O ²
Production	255,000tpy SC6 ³
PLL Offtake	50% of annual production
DFS Timing	2023
Production	H2 2024
Capex	\$125mm ³
Opex	\$278/t SC6 ³
After-tax NPV ₈	\$1.33bb ³
After-tax IRR	224% ³

2. Refer to Atlantic Lithium AIM announcement dated March 24, 2022 for JORC Code Compliant MRE.
3. Refer to Atlantic Lithium AIM announcement dated September 22, 2022.

1. Piedmont owns ~56.9mm shares of Atlantic Lithium (AIM: ALL) and has an earn-in agreement for 50% of the Ewoyaa project. Market cap as of October 28, 2022.

GHANA

Progress at Ewoyaa



Reverse Circulation drilling to expand resource base

Exploration results remain consistent



Ewoyaa resource samples

Ewoyaa core samples

COO Patrick Brindle, U.S. Ambassador to Ghana Virginia Palmer and Piedmont Chief Geologist Lamont Leatherman

TENNESSEE LITHIUM

100% Owned by Piedmont Lithium



HIGHLIGHTS

- 30,000tpy LiOH Production
- Spodumene feed from market sources, including offtake agreement with Atlantic Lithium
- Excellent rail, river and road transport
- Sister plant to the LiOH plant planned at Carolina Lithium
- Awarded \$142mm DOE grant under Bipartisan Infrastructure Law

UPCOMING MILESTONES

- Feasibility study – Q4 2022
- FEED – mid-2023
- Production targeted for 2025
- Project financing
 - Strategic partnering
 - ATVM loan



FACT SHEET¹

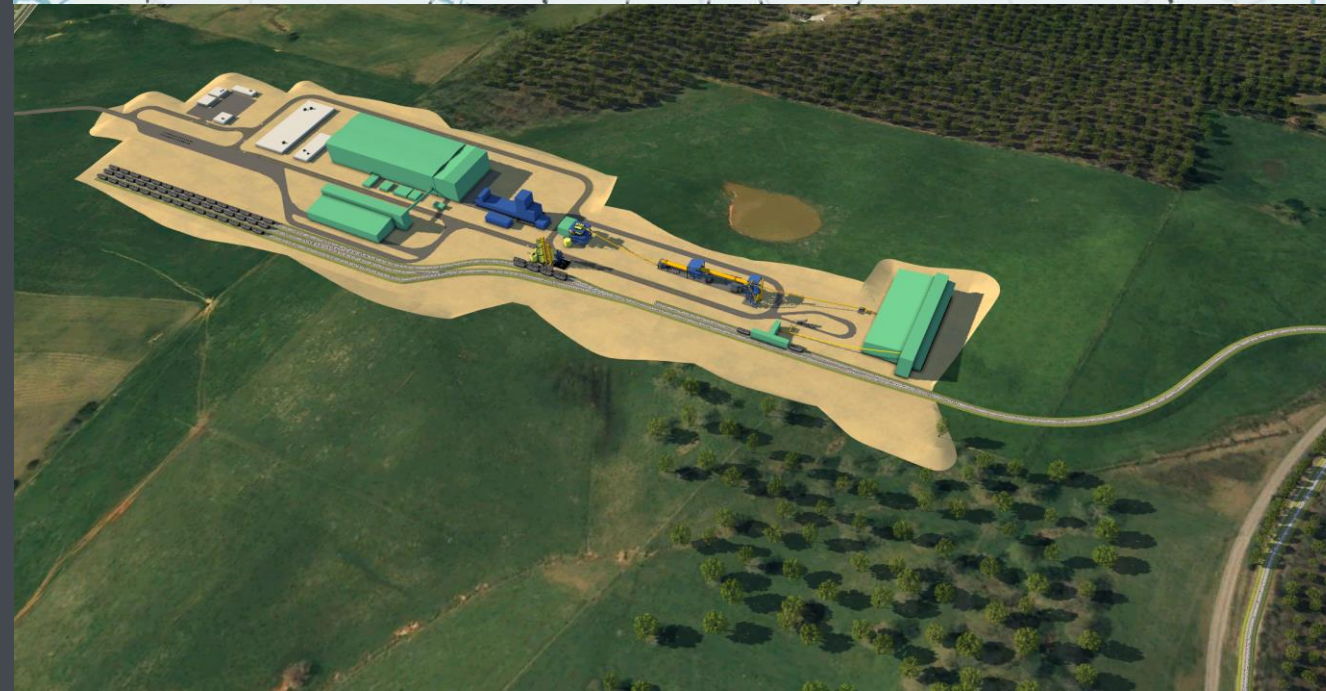
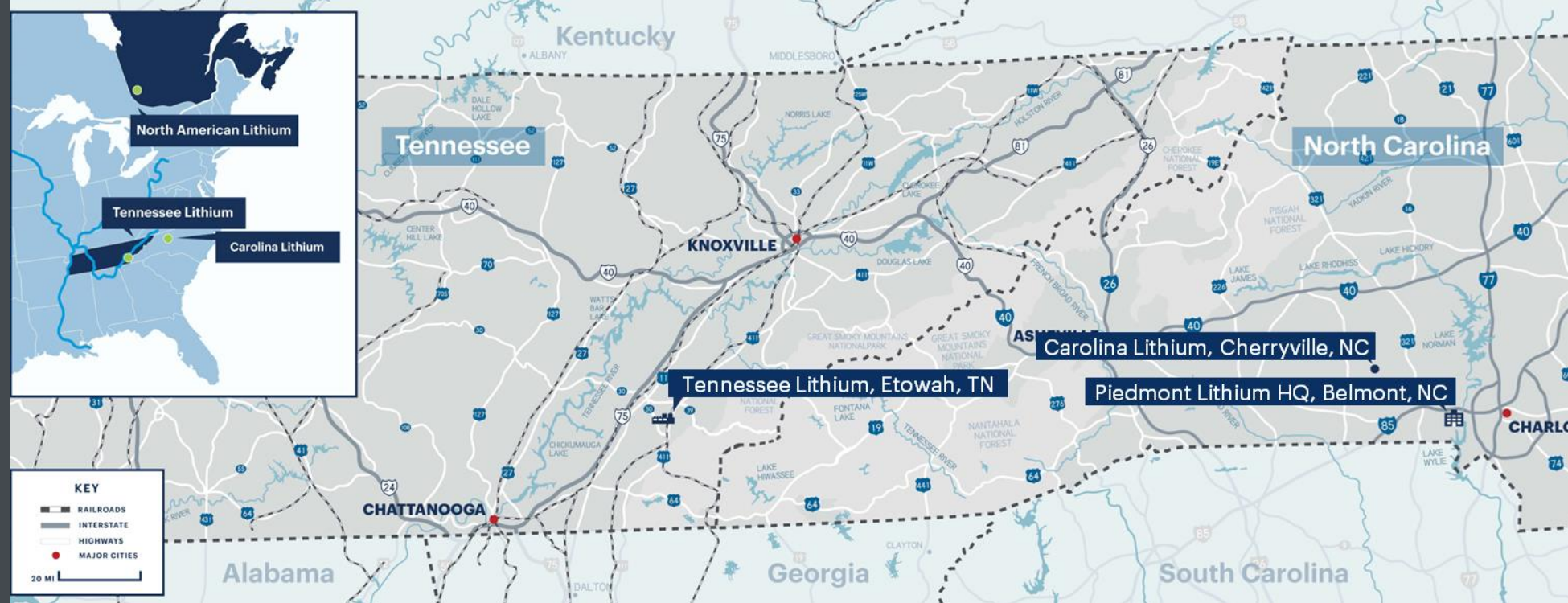
Location	Etowah, McMinn County, TN
Project Stage	Preliminary Economic Assessment
Product	Lithium Hydroxide
Production	30,000tpy LiOH
Feedstock	196,000tpy SC6
Capex	\$572 million
Opex	\$10,630/t LiOH
EBITDA	\$346mm
After-tax NPV ₈	\$2.2 billion
After-tax IRR	33%
Payback	3.1 years

1. Refer to results of PLL Preliminary Economic Assessment announcement dated March 9, 2022. All amounts are estimated based on current projections.

TEN

SITE SELECTION

- Development-ready site
 - Air permit application to be submitted in Q4' 22
- Strong local workforce
- Strong business climate
- Proximity to battery and automotive plants
- Located near existing infrastructure:
 - Rail
 - Highways
 - Waterways
- Proximity to Piedmont Lithium's headquarters and Carolina Lithium project
- Strong city, county and state government support



CEO Keith Phillips and Commissioner of Tennessee Department of Economic and Community Development Stuart McWhorter

CAROLINA LITHIUM

100% Owned by Piedmont Lithium



HIGHLIGHTS

- Located in Gaston County, NC, the cradle of the lithium business
- Strong infrastructure
- Single integrated site
- Skilled local labor
- Proximity to lithium and byproduct markets
- Industry-leading ESG profile
- Projected to be a low-cost producer

UPCOMING MILESTONES

- Permitting and rezoning
- Detailed engineering / FEED
- LiOH and byproduct offtake
- Project financing
 - Strategic partnering
 - ATVM loan



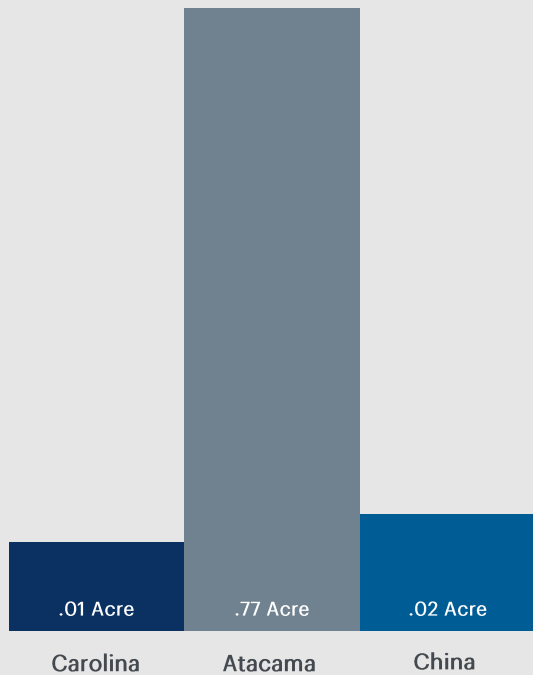
“We have to lead by example. And if we do that, we’ll accelerate our self-dependence and eliminate reliance on China by decades. And that’s why I support this project.” U.S. Senator Thom Tillis, speaking at the groundbreaking for Piedmont’s new corporate HQ in Belmont, NC, August 31, 2022.

FACT SHEET¹

Location	North Carolina, USA
Project Stage	Feasibility Study
Product	Lithium Hydroxide
Resources	44.2Mt @ 1.08% Li ₂ O
Production	30,000tpy LiOH
Feedstock	242,000tpy SC6
Capex	\$988 million
Opex	\$4,377/t LiOH
EBITDA	\$592mm first 10 years ²
After-tax NPV ₈	\$2.8 billion ²
After-tax IRR	34% ²
Payback	2.9 years ²

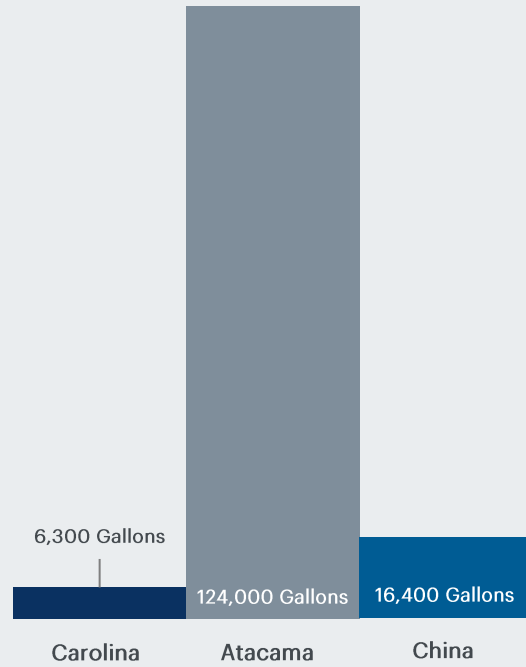
1. Refer to results of PLL Bankable Feasibility Study announcement dated December 14, 2021. Estimates prepared pursuant to SEC S-K 1300 and the JORC Code.
2. Refer to results of PLL Preliminary Economic Assessment announcement dated March 9, 2022. Illustrative financial outcomes for the Carolina Lithium Project when applying a fixed price of \$22,000 per metric tonne of lithium hydroxide and \$1,200 per metric tonne of spodumene concentrate to the Carolina Lithium financial model. Results are Company estimates and indicative only and are not independently verified by the Carolina Lithium BFS Qualified Persons.

CAROLINA LITHIUM - INDUSTRY LEADING SUSTAINABILITY



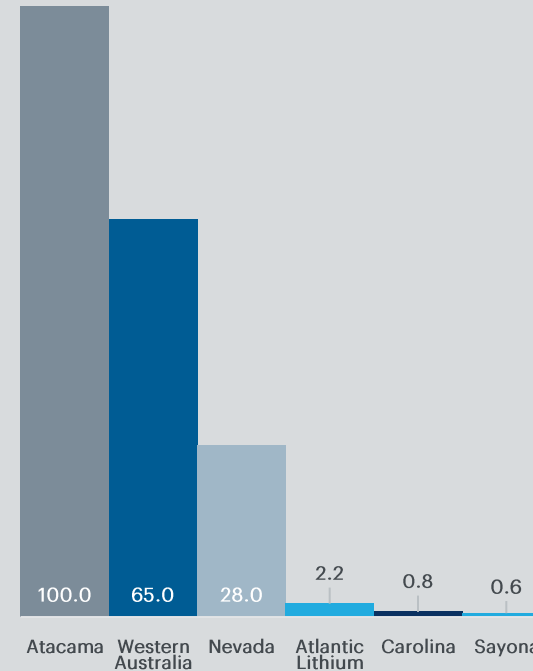
Land Footprint ¹

Per Tonne of Lithium Hydroxide Monohydrate Per Year



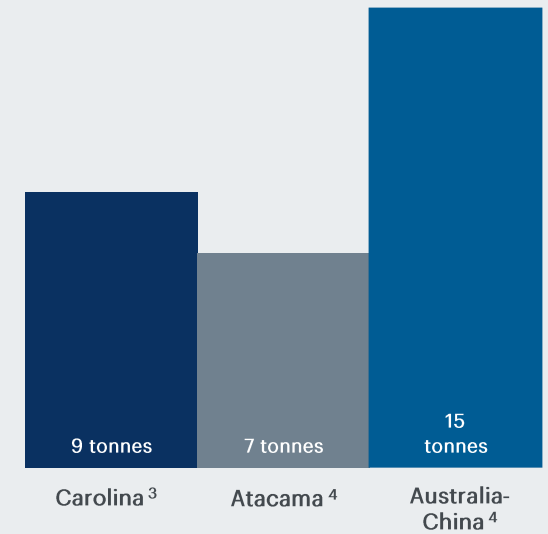
Direct Water Use ¹

Per Tonne of Lithium Hydroxide Monohydrate



Water Scarcity Factor ²

Measured on Index of 0 (low scarcity) to 100 (high scarcity)



Carbon Intensity (Scope 1-3)

Per Tonne of Lithium Hydroxide Monohydrate

1. Piedmont Lithium Calculations Based on Public Reports (2021)
 2. WULCA - AWARE Factors for Non-Agricultural Activities: <https://wulca-waterlca.org/aware/what-is-aware/>
 3. Prospective LCA Study of Lithium Hydroxide Production at the Piedmont Lithium Project, Minviro Confidential Report (2021) – Target Decarbonized Project Scenario
 4. The CO₂ Impact of the 2020s' Battery Quality Lithium Hydroxide Supply Chain, Minviro Public Report (2020)

CAROLINA LITHIUM

Advancing Project Regulatory Approvals for Development & Construction

Remaining Key Permit Approvals

Federal 404 Permit Received in 2019

- State Mining Permit – Submitted 8/31/21
 - Public Hearing completed 11/15/21 through 11/18/21
 - Responding to Department Comments
- Air Permit – Submitted 8/31/22
- Individual Stormwater/Wastewater Permit – applications planned for 2022
- Municipal Wastewater Permit – application planned for 2023
- Local Approvals Applications will Follow State Mine Permit
 - Gaston County I-3 Industrial Rezoning
 - Gaston County Special Use Permit

Gaston County Quarry and Mining Ordinances

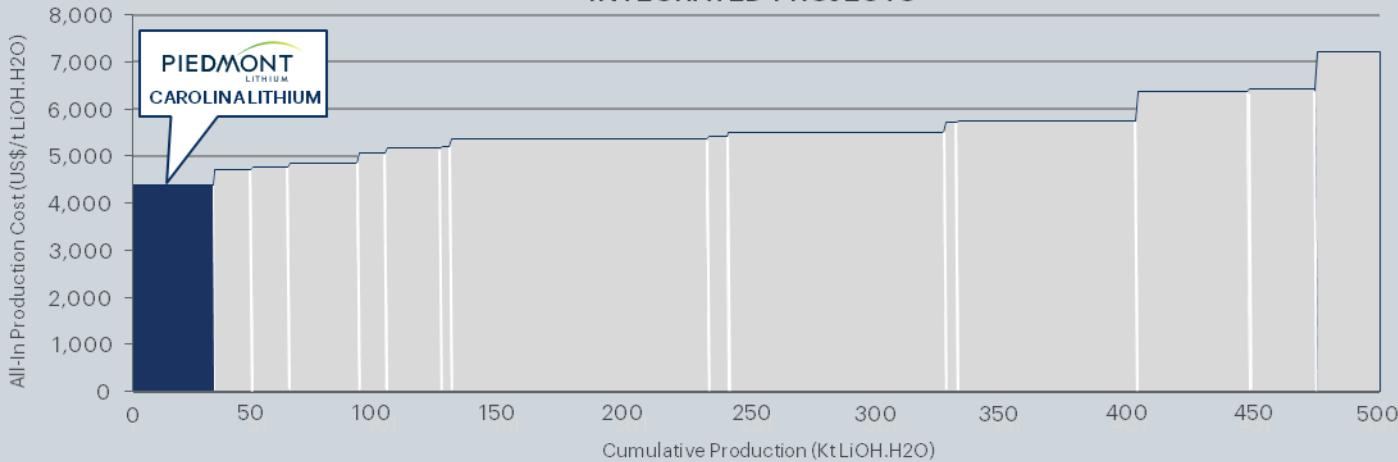
Reasonable and Fair Development and Operating Standards

- Blasting – daylight hours 6 days per week / excluding holidays
- Trucking – shipments allowed from 6:00 AM to 10:00 PM
- Reasonable setback distances to neighboring properties
- Noise mitigation plan standards
- Dust mitigation plan standards
- Security, access and fencing standards
- Visual screening, berms and wall standards
- Rezoning process mechanics clarified

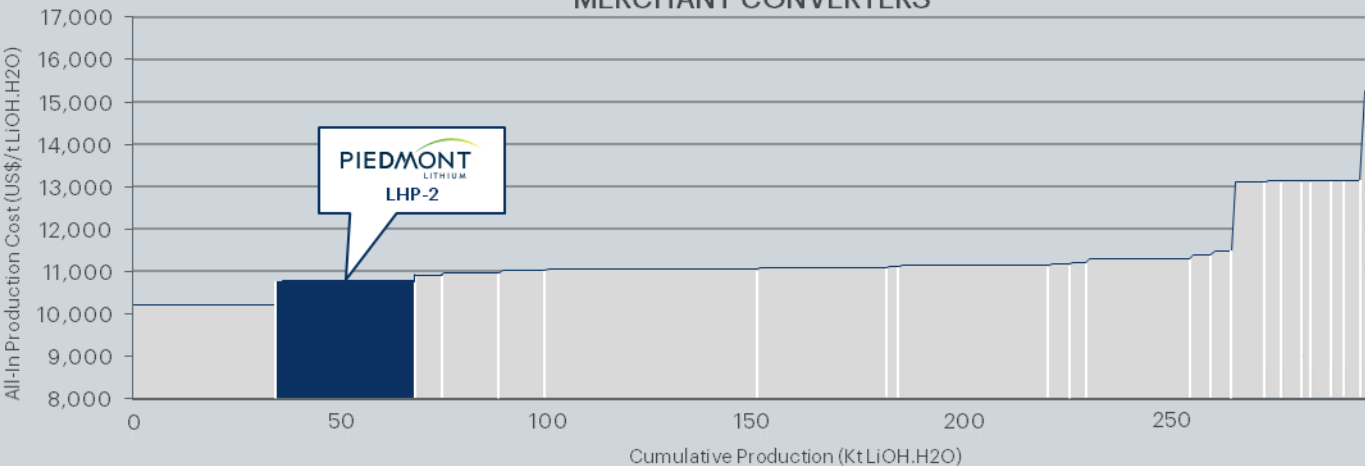
COST CURVES¹

Location Drives Projected Cost Advantages

INTEGRATED PROJECTS



MERCHANT CONVERTERS



PIEDMONT VS. AUSTRALIAN PRODUCERS²



North Carolina



Western Australia



PLL Advantage Per LiOH Tonne

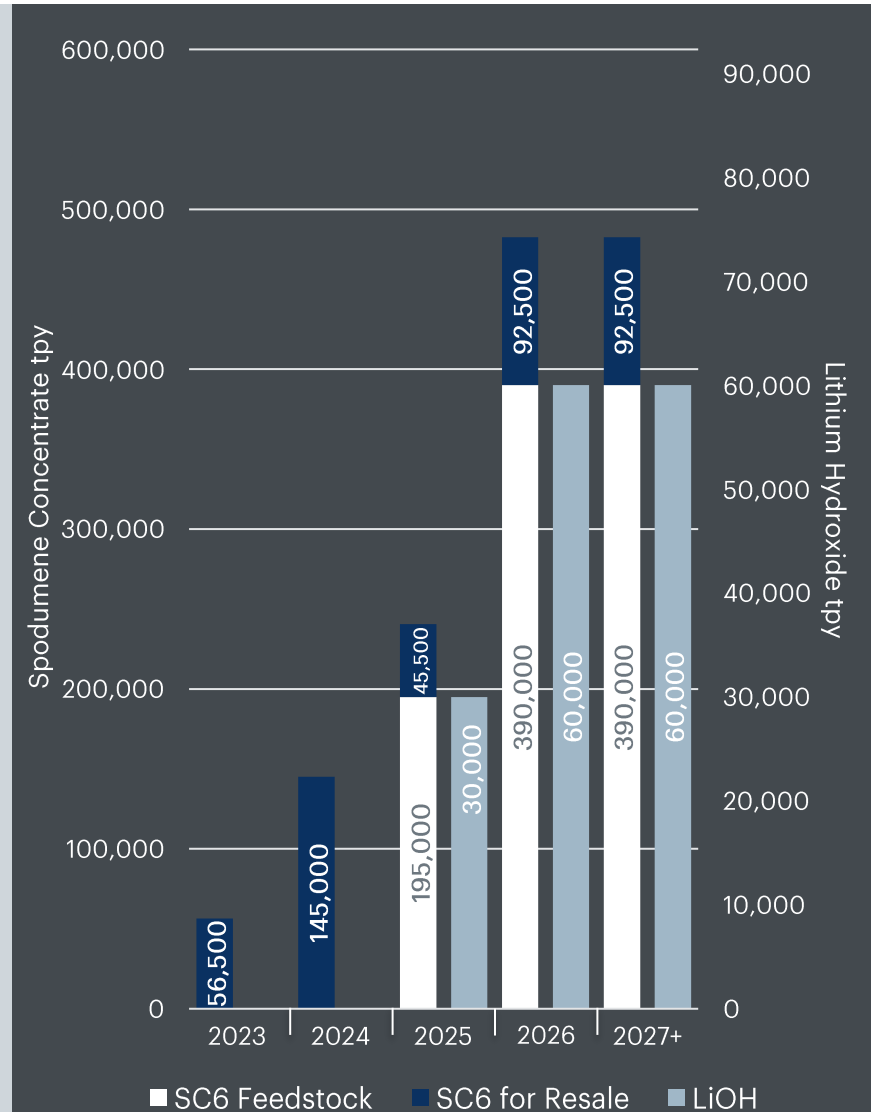
Personnel (US\$/y avg.)	\$90,000	\$150,000	~\$300
Electricity (kWh)	5.7c	17.0c	~\$300
Natural Gas (Gi)	\$4.01	\$9.00	~\$130
SC6 Transport (T)	\$2	\$71	~\$475
LiOH Tailing Disposal (T)	\$0	\$50	~\$350
State Royalties	0%	5%	~\$225
By-product Credits (T)	\$147	\$0	~\$950

1. Source: Roskill Lithium Cost Model Service - Extractive - 2028 Production and Cost Forecast. All-In Sustaining Cost includes all direct and indirect operating costs related directly to the physical activity of producing lithium compounds, including mining/extraction, processing, refining and on-site general and administrative costs.

2. Source: Assumes 6.5:1 SC6:LiOH ratio. Company estimates derived from PLL Bankable Feasibility Study results announced on December 15, 2021.

ANNUAL MARKETABLE CAPACITY¹

	2023	2024	2025	2026	2027+	
Spodumene Concentrate	Sayona Quebec ²	56,500	113,000	113,000	113,000	113,000
	Atlantic Lithium ³	-	32,000	127,500	127,500	127,500
	Carolina Lithium ⁴	-	-	-	242,000	242,000
	Produced	56,500	145,000	240,500	482,500	482,500
	Feedstock for Conversion ⁵	-	-	195,000	390,000	390,000
	SC6 Available for Sale	56,500	145,000	45,500	92,500	92,500
Lithium Hydroxide	Tennessee Lithium ⁶	-	-	30,000	30,000	30,000
	Carolina Lithium ⁴	-	-	-	30,000	30,000
	LiOH Available for Sale	-	-	30,000	60,000	60,000



- Figures represent year-end nameplate capacity and not projected annual production.
- Assumes a restart of NAL in H1'23 and 6-months of production in 2023 at year-end nameplate capacity. Piedmont has an offtake agreement for the greater of 113,000tpy or 50% of production. Project target is 168,000tpy of SC6 based on Sayona Pre-Feasibility Study released May 23, 2022.
- Assumes first production in Q3'24 and 3-months of production in 2024 at year-end nameplate capacity. Piedmont has an earn-in agreement for 50% offtake of SC6 production. Project target is 255,000tpy of SC6 from Atlantic Lithium Pre-Feasibility Study released September 22, 2022.
- Refer to Carolina Bankable Feasibility Study filed on December 14, 2021.
- Based on estimate of 195,000tpy of SC6 to produce 30,000tpy LiOH.
- Tennessee Lithium is the subject of a Preliminary Economic Assessment issued on March 9, 2022.

ORE RESERVES AND MINERAL RESOURCES

PLL Global Mineral Resources - 100% Basis for Each Project

Category	Carolina Lithium ¹				Sayona Quebec ²				Atlantic Lithium ³			
	Mt	Grade (Li ₂ O%)	Li ₂ O (kt)	LCE (kt)	Mt	Grade (Li ₂ O%)	Li ₂ O (kt)	LCE (kt)	Mt	Grade (Li ₂ O%)	Li ₂ O (kt)	LCE (kt)
Ore Reserves												
Proven	-	-	-	-	1.2	0.92%	11	27	-	-	-	-
Probable	18.3	1.10%	201	497	28.0	0.96%	269	665	18.9	1.24%	234	580
Total Ore Reserves	18.3	1.10%	201	497	29.2	0.96%	280	692	18.9	1.24%	234	580
Mineral Resources												
Measured	-	-	-	-	7.5	0.98%	74	182	-	-	-	-
Indicated	28.2	1.12%	315	780	80.3	1.05%	846	2,091	20.5	1.29%	265	654
Total M&I	28.2	1.12%	315	780	87.8	1.05%	919	2,274	20.5	1.29%	265	654
Inferred	15.9	1.02%	162	401	31.2	1.07%	334	826	9.6	1.19%	114	281
Total	44.2	1.08%	477	1,181	119.1	1.05%	1,254	3,100	30.1	1.26%	379	936

1: Piedmont Lithium Mineral Resources as of October 21, 2021 and Ore Reserves as of December 14, 2021.

2: Refer to Sayona Mining ASX announcement dated March 1, 2022 for JORC Code Compliant MRE.

3: Refer to Atlantic Lithium AIM announcement dated March 24, 2022 for JORC Code Compliant Mineral Resource Estimate and AIM announcement dated September 22, 2022 for Ore Reserves.

INVESTOR MARKETING

Sep		Sep 7 – 9	Cowen Global Transportation & Sustainability Mobility Conference	Virtual
		Sep 14	Credit Suisse Specialties & Basics Conference	New York, New York
		Sep 20 - 21	Fastmarkets European Battery Raw Materials Conference	Barcelona, Spain
		Sep 22 - 23	DA Davidson Diversified Industrials & Services Conference	Nashville, Tennessee
		Sep 26-30	Canaccord Non-Deal Roadshow	Sydney & Melbourne
Oct		Oct 5 – 6	121 Group Mining Investment New York	New York, New York
		Oct 19	North American Lithium Site Visit	Quebec, Canada
		Oct 13	NASEO Annual Meeting	St. Petersburg, Florida
		Oct 26	ThinkEquity Investor Conference	New York, New York
		Oct 31 – Nov 1	Gabelli 46 th Annual Automotive Symposium	Las Vegas, NV
Nov		Nov 1	Credit Suisse First Boston Non-Deal Roadshow	Virtual
		Nov 9	Red Cloud Financial Services Fall Mining Showcase	Toronto, Canada
		Nov 14 - 18	Benchmark Week 2022	Los Angeles, California
		Nov 29 – 30	Citi Basic Materials Conference	New York, New York
Dec		Dec 7	Deutsche Bank Annual Lithium Conference	New York, New York
		Dec 8	Bank of America Lithium Day	Virtual

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PIEDMONT PROJECT NOTES

Quebec

- Piedmont owns ~1.2bb shares of Sayona Mining (ASX: SYA) and 25% of the Sayona Quebec joint venture.
- Market cap as of October 28, 2022 in U.S. dollars.
- See Sayona Mining ASX release dated May 23, 2022 for results of Pre-Feasibility Study for North American Lithium.
- Piedmont's offtake right with Sayona Mining is the greater of 50% of SC6 production or 113,000tpy at market prices, subject to a price floor of \$500/t and a ceiling of \$900/t. See Sayona Mining ASX announcement dated June 28, 2022 for a summary of offtake agreement terms.
- EBITDA calculation is based on 113,000tpy sold at market prices and purchased at \$900/t through Piedmont's offtake ("Offtake EBITDA") and 25% of the EBITDA generated by Sayona Quebec for the remaining tonnage to account for Piedmont's pro-rata ownership (also referred to as "JV EBITDA"). Cash production cost is \$590/t based on results of North American Lithium Pre-Feasibility Study and all other costs are held constant. Transport costs are excluded.

Ghana

- Piedmont owns ~56.9mm shares of Atlantic Lithium (AIM: ALL, ASX: A11) and has an earn-in agreement for 50% of the Ewoyaa project based on meeting funding requirements reported in Atlantic Lithium's Pre-Feasibility Study. See Atlantic Lithium's AIM announcement dated September 22, 2022 for the results of the Ewoyaa Pre-Feasibility Study.
- Market cap as of October 28, 2022 in U.S. dollars.
- Piedmont's is earning a 50% offtake right based upon funding requirements reported in Atlantic Lithium's Pre-Feasibility Study dated September 22, 2022. Summary of offtake supply agreement is included in Piedmont's press release dated July 1, 2021.
- Refer to Atlantic Lithium AIM announcement dated September 22, 2022. NPV and IRR figures utilize \$1,359/t SC6 price based on Atlantic's published study.

Tennessee – 100% owned by Piedmont Lithium

- The Tennessee Lithium Project is the subject of a Preliminary Economic Assessment issued on March 9, 2022. Its development remains subject to, among other things, permitting and financing.
- The results shown for spot case NPV and EBITDA are Company estimates based on LiOH and SC6 pricing of \$82,000/t and \$7,900/t, respectively. All other cost variables are held constant. Company estimates for spot case figures are indicative only and are not independently verified by Primero Group Americas, authors of the PEA.
- Piedmont Lithium was selected for a \$142mm DOE Grant. See Piedmont's press release announced on October 19, 2022.

Carolina Lithium – 100% owned by Piedmont Lithium

- The Carolina Lithium Project is the subject of a Bankable Feasibility Study filed on December 14, 2021.
- The Results shown for both spot NPV and EBITDA are Company estimates based on LiOH and SC6 pricing of \$82,000/t and \$7,900/t, respectively. For example, the spot EBITDA is estimated by applying the revised spot price to the pricing model used in the Bankable Feasibility Study, with all other variables held constant. Company estimates are indicative only and are not independently verified by the Carolina Lithium BFS Qualified Persons. EBITDA results shown for Carolina Lithium are for steady State during integrated operations during the first 10 years of operation.

PEER PROJECT NOTES

Company	Project	Ownership	Annual SC6 Production	Annual Lithium Chemical Production	Pro-rata Production	Source
Piedmont Lithium	Sayona Quebec ¹	25%	> 113,000 or 50% of production	--	113,000	ASX Announcement - Positive Pre-Feasibility Study Enhances, May 23, 2022
Piedmont Lithium	Ewoyaa	50%	255,000	--	127,500	AIM Announcement - Robust Ewoyaa Pre-Feasibility Study, September 22, 2022
Piedmont Lithium	Tennessee Lithium	100%	--	30,000	30,000	PLL Press Release - Piedmont Completes PEA for Second U.S. Lithium Hydroxide Plant, March 9, 2022
Piedmont Lithium	Carolina Lithium	100%	242,000	30,000	30,000	PLL Press Release - Piedmont Completes BFS of the Carolina Lithium Project, December 14, 2021
Sayona Mining	Sayona Quebec ¹	75%	168,000	--	126,000	ASX Announcement - Positive Pre-Feasibility Study Enhances, May 23, 2022
Core Lithium	Finniss	100%	160,000	--	160,000	ASX Announcement - Definitive Feasibility Study Investor Presentation, July 26, 2021
Liontown Resources	Kathleen Valley	100%	500,000	--	500,000	ASX Announcement - Kathleen Valley DFS Presentation, November 11, 2021
Lithium Americas	Cauchari-Olaroz	49%	--	60,000	29,400	Lithium Americas Website - Cauchari-Olaroz Overview
Lithium Americas	Thacker Pass (Phase 1)	100%	--	40,000	40,000	Lithium Americas Website - Thacker Pass Project Summary
Sigma Lithium	Xuxa (Phase 1)	100%	230,000	--	230,000	Press Release - Sigma Lithium Phase 3 Technical Report, August 9, 2022
Sigma Lithium	Barreiro (Phase 2)	100%	210,400	--	210,400	Press Release - Sigma Lithium Phase 3 Technical Report, August 9, 2022
Livent	Carbonate for Sale	100%	--	30,000	30,000	Livent Website - Corporate Presentation, May 2022
Livent	Carbonate Conversion	100%	--	45,000	45,000	Livent Website - Corporate Presentation, May 2022
Livent	Nemaska	50%	250,000	34,000	125,000 / 17,000	Livent Website - Corporate Presentation, May 2022

LiOH

PIEDMONT
LITHIUM

LITHIUM – MADE IN THE USA

Helping Secure America's Energy Security

November 2022

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