



PIEDMONT LITHIUM, INC.

2022 ANNUAL MEETING OF SHAREHOLDERS

POWER WITH TOMORROW IN MIND

PLL



ANNUAL MEETING AGENDA

PROPOSAL 1

- Election of Directors

PROPOSAL 2

- Ratification of Auditor Selection

PROPOSAL 3

- Approval to Issue Stock Options to Mr. Keith Phillips

PROPOSALS 4-9

- Approval to Issue Restricted Stock Units to Directors

BUILDING AMERICA'S LEADING LITHIUM HYDROXIDE BUSINESS

 Nasdaq:PLL

 ASX:PLL

ARBN 647 286 360

LiOH

Annual Meeting - February 3, 2022

DISCLAIMERS



Forward Looking Statements

This presentation contains forward-looking statements within the meaning of or as described in securities legislation in the United States and Australia, including statements regarding exploration, development and construction activities; 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 ability to obtain required capital to execute its business plan, (v) Piedmont'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, (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 Quebec and 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 by the U.S. Securities and Exchange Commission ("SEC") in Regulation S-K, Item 1300 ("S-K 1300") and as defined in accordance with 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.

PIEDMONT AT A GLANCE

	An American company based in Gaston County, NC
	World-class mineral resources in U.S., Quebec and Ghana
	Developing 60,000 tpy of U.S. LiOH production on two sites
	Potential for near-term cash flow with 2023 NAL restart
	Industry-leading sustainability profile
	Proven leadership team

CORPORATE SNAPSHOT

PIEDMONT LITHIUM



Shares / CDIs Outstanding (100 CDIs = 1 Share)	15.89 mm	1,589.0 mm
Price (@ 1/28/22)	\$44.28	A\$0.645
Average Daily Trading Volume (30-day)	\$15 mm	A\$4 mm
Market Cap (@ 1/28/22)	\$703 mm	A\$1,024 mm
Cash (@ 9/30/21)	\$82 mm	A\$117 mm
Equity Interests at Market (@ 1/28/22)	\$125 mm	A\$178 mm

RESEARCH COVERAGE

J.P.Morgan

EVERCORE ISI

CANACCORD|Genuity

 Loop Capital

 BTIG

 Clarksons Platou
Securities


D|A|DAVIDSON


B | RILEY *Securities*

 ROTH Capital Partners

TUOHY BROTHERS
INVESTMENT RESEARCH INC

LITHIUM MARKET TRENDS

 Nasdaq:PLL

 ASX:PLL

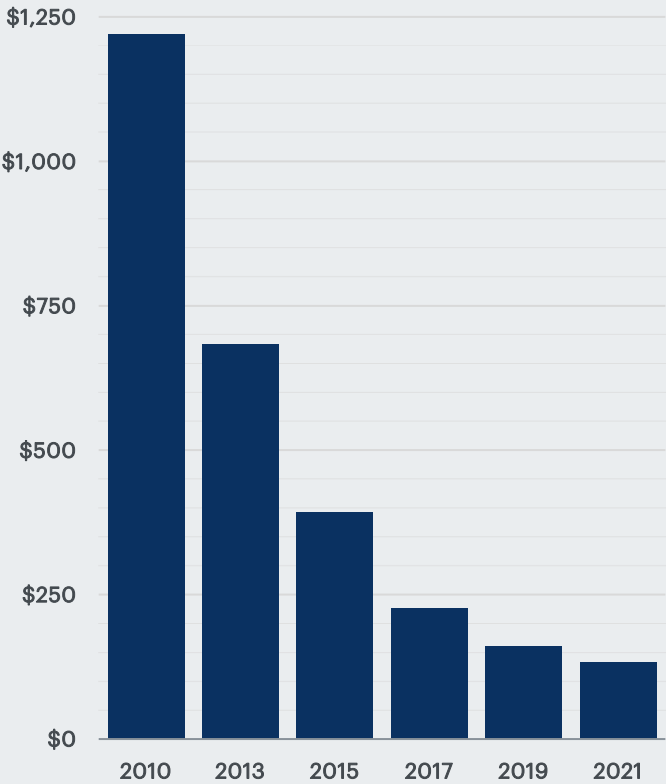
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LiOH

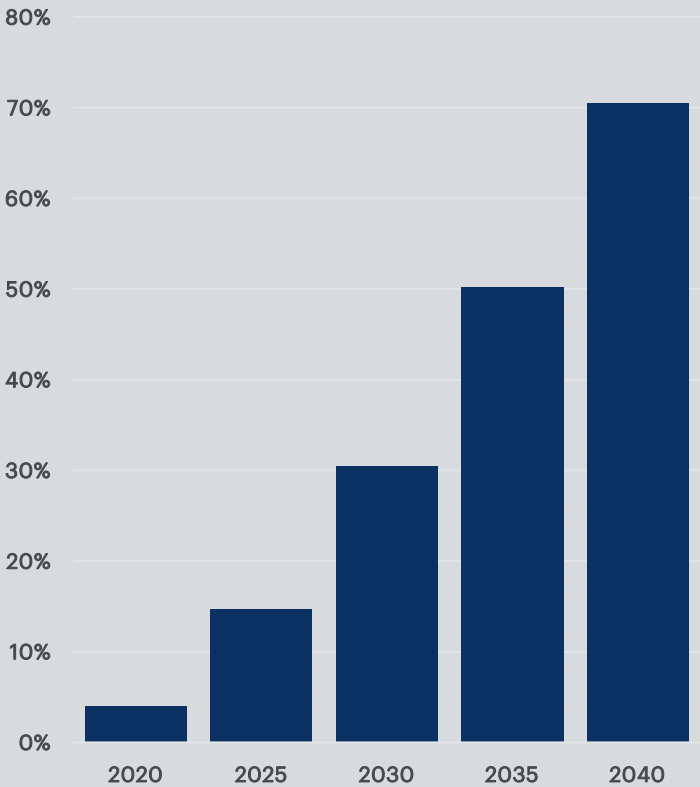


LITHIUM MARKET TRENDS

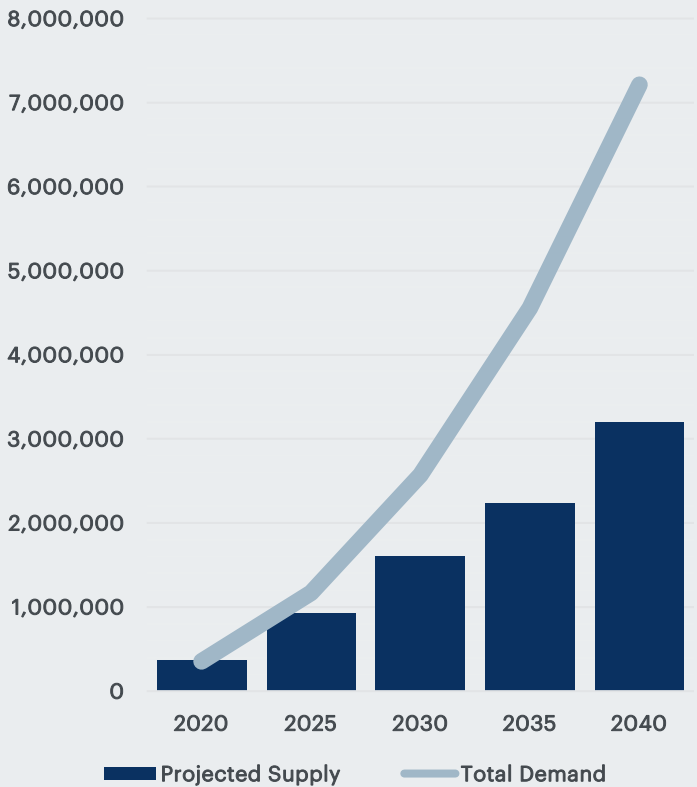
LI-ION BATTERY COSTS DOWN 85% SINCE 2010
(PACK PRICE – REAL 2021 \$/KWH)



EV PENETRATION



LITHIUM SUPPLY SHORTFALLS EXPECTED



7 Source: BloombergNEF – 11/30/2021

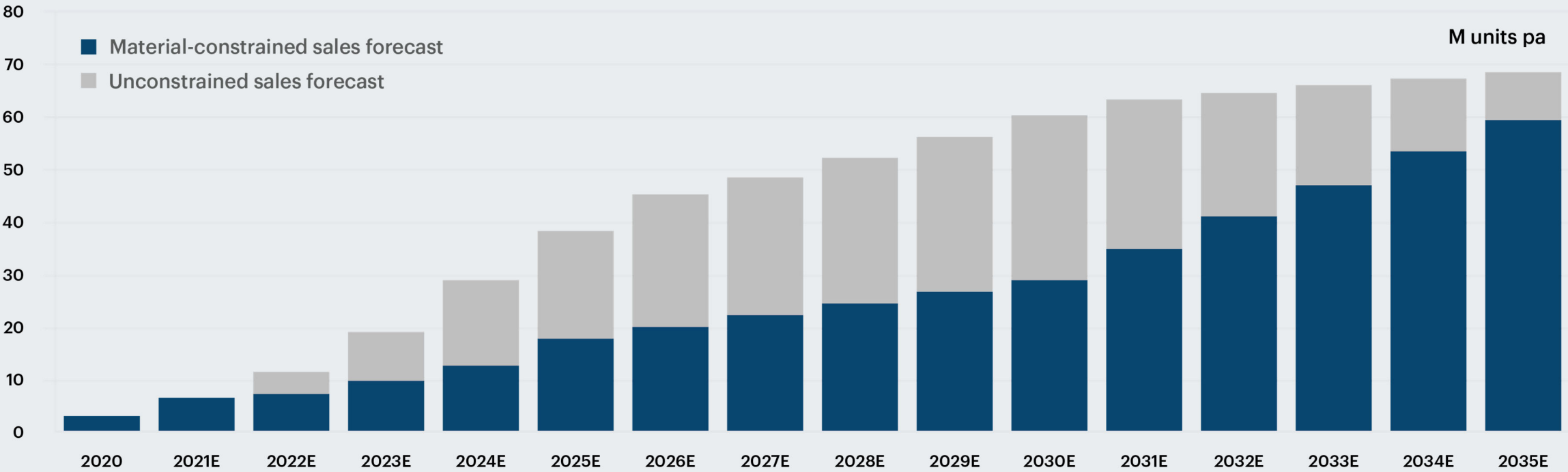
Source: Benchmark Mineral Intelligence – Lithium Forecast, Q3 2021

Source: Benchmark Mineral Intelligence – Lithium Forecast, Q3 2021



EV SALES FORECAST

MATERIAL-CONSTRAINED VS. UNCONSTRAINED EV SALES FORECAST

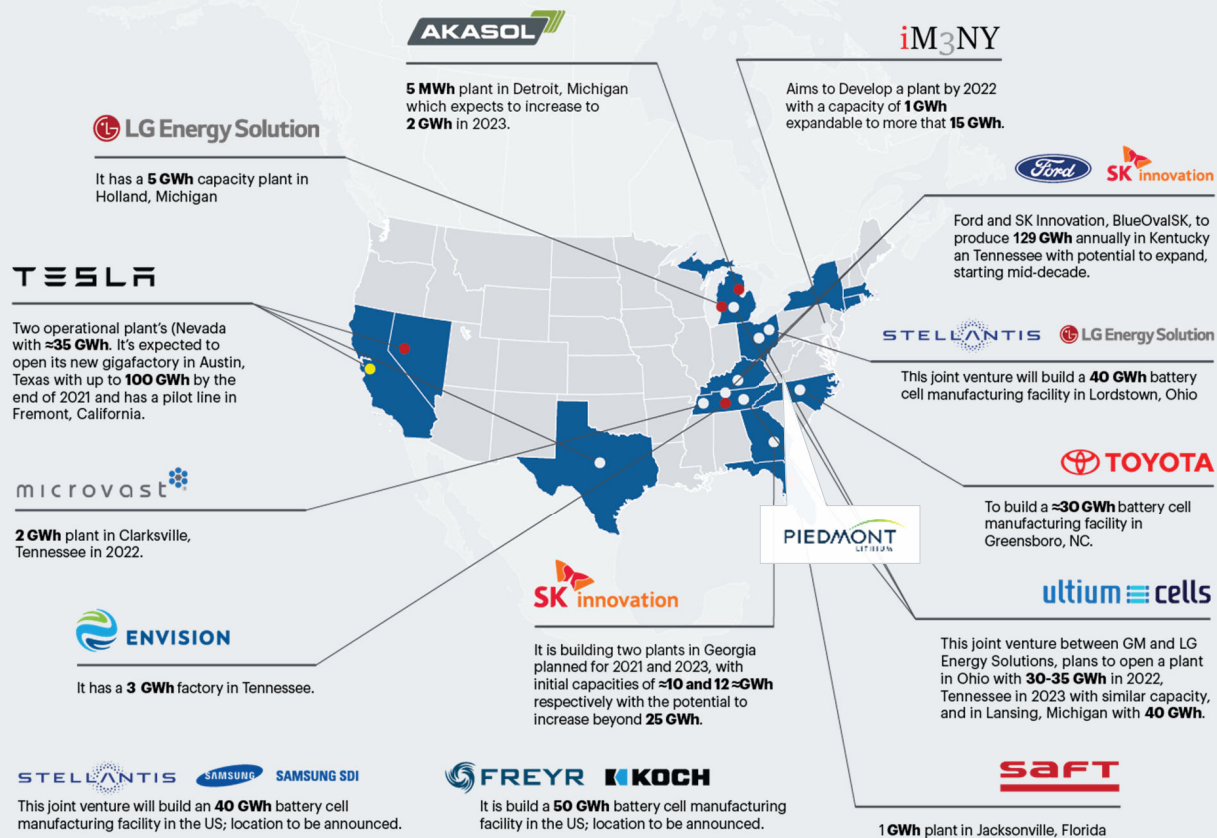


Source: Battery Material Review, Westbeck Capital estimates

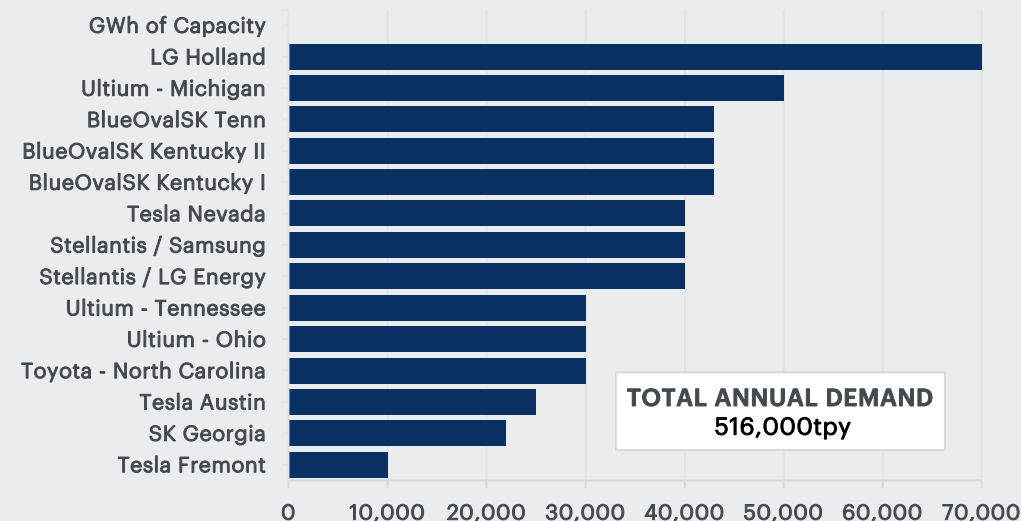
DOMESTIC SHORTFALLS ANTICIPATED

Commitments of Over \$25 Billion to Build U.S. Battery Capacity by 2030

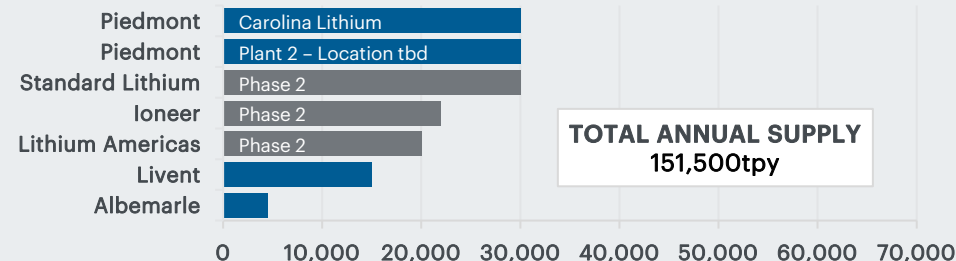
AMERICAN GIGAFACTORIES



LiOH REQUIRED BY SELECTED GIGA-FACTORIES BY 2025+



SELECTED US LITHIUM HYDROXIDE SUPPLY BY 2025+

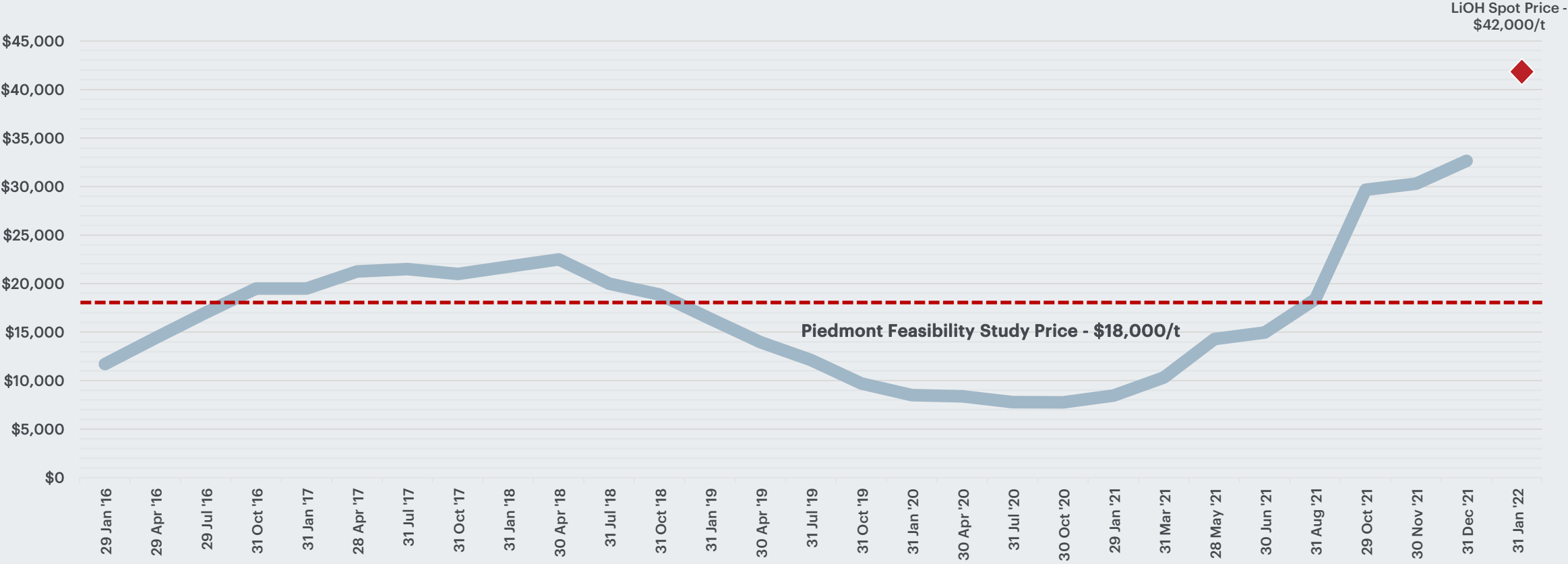


Source: Benchmark Mineral Intelligence – Lithium Forecast, Q3 2021, company announcements and Piedmont Lithium estimates



LITHIUM HYDROXIDE PRICES

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



STRATEGIC ACTIVITY INCREASING

M&A and Strategic Investments Accelerating Due to Scarcity of World-class Resources

INDUSTRY CONSOLIDATION

- Piedmont / Sayona Mining
- Piedmont + Sayona / NAL
- Piedmont / Atlantic Lithium
- Orocobre / Galaxy -> Allkem
- Albemarle / Wodgina
- Pilbara / Altura
- SQM / Mt. Holland
- LAC / Millennial
- Livent / Nemaska
- Allkem / Advantage Lithium
- LAC / Arena Minerals
- Lepidico / Desert Lion

CHINESE GLOBAL GROWTH


- Ganfeng / Cauchari
- Ganfeng / Goulamina
- Ganfeng / Bacanora
- Ganfeng / Mt. Marion
- Ganfeng / Arena Minerals
- Ganfeng / Core Lithium
- Ganfeng / Galan Lithium
- Huayou / Prospect Resources
- Zijin / Neo Lithium
- Tsinghan / Eramet
- CATL / AVZ Minerals
- Nextview / Lithium X
- Tianqi / SQM
- China Hydrogen / Alita
- Yahua / Core Lithium


NEW INDUSTRY ENTRANTS

- Rio Tinto / Rincon
- IGO / Greenbushes
- Wesfarmers / Kidman
- POSCO / Sal de Vida
- POSCO / Pilbara JV
- Pluspetrol / LSC Lithium
- CEZ / European Metals
- Sibanye Stillwater / Ioneer
- Sibanye Stillwater / Keliber
- Schlumberger / Pure Energy
- IQ + Pallinghurst / Nemaska
- Koch / Standard Lithium
- Uranium One / Alpha Lithium
- Fortescue / Portugal exploration



PIEDMONT OVERVIEW

 Nasdaq:PLL

 ASX:PLL

ABN 50 002 664 495

LiOH

LEADERSHIP



KEITH PHILLIPS
Chief Executive Officer

COWEN

J.P.Morgan



Patrick Brindle
Chief Development Officer

David Klanecky
Chief Operations Officer

Bruce Czachor
Chief Legal Officer

Michael White
Chief Financial Officer

Austin Devaney
Chief Commercial Officer

Kris McVey
Chief Human Resources Officer

Lamont Leatherman
Chief Geologist

Monique Parker
VP, HS&E

Brian Risinger
VP Corporate Comm. & IR



2021 ACCOMPLISHMENTS

Feasibility Study for Carolina Lithium¹

- 30,000tpy LiOH production
- \$2.0bb after-tax NPV and 27% after-tax IRR
- \$450mm+ steady-state EBITDA
- State permitting and local rezoning processes formally commenced

Investments in International Resources

- Acquired ~37% economic interest in Sayona Quebec, including North American Lithium
 - One of Canada's largest and most-advanced lithium projects
- Acquired 9.9% of Atlantic Lithium and earning up to 50% of ALL's Ghana lithium assets
 - High-grade spodumene concentrate for export to North America
- Investments underpin strategy to grow American lithium hydroxide production

Executive Appointments

- David Klanecky appointed as COO
- Michael White appointed as CFO
- Key hires in important technical, engineering, commercial and staff roles
- Enhanced Board capability and diversity with addition of three senior operating executives

Corporate

- Redomiciled to become a U.S. company
- Raised \$122mm equity in March 2021
- Appointed Evercore and JPMorgan to seek strategic partners to fund Carolina Lithium Project
- Applied for an ATVM loan via the U.S. Department of Energy's Loan Programs Office



OUR ASSETS

We Have Invested in the Mineral Resources to Support our Mission to Become America’s Largest Producer of Lithium Hydroxide

SPODUMENE CONCENTRATE	LITHIUM HYDROXIDE
<div>CAROLINA LITHIUM USA North Carolina 242,000tpy SC6¹</div>	<div>USA LIOH PLANT ONE North Carolina – Gaston County 30,000tpy LiOH</div>
<div>EWoyaa Ghana 150,000tpy SC6²</div>	<div>USA LiOH PLANT TWO Location TBD 30,000tpy LiOH</div>
<div>ABITIBI HUB Quebec 113,000tpy³</div>	<div>QUEBEC LiOH PLANT (UNDER CONSIDERATION) Location TBD Scale TBD</div>

1: Annual spodumene concentrate production per Bankable Feasibility Study Results released December 14, 2021.
2: Piedmont’s 50% offtake share of spodumene concentrate production from Atlantic Lithium Scoping Study updated released December 7, 2021.
3: Piedmont offtake is for the greater of 113,000tpy or 50% of production.

PROJECTS



CAROLINA LITHIUM (100% OWNERSHIP)

PLL

Project	Carolina Lithium
Location	Gaston County, North Carolina
Phase 1 Project Stage	Feasibility Study
Mineral Resources	44.2Mt @ 1.08% Li ₂ O
Production	30,000tpy LiOH; 242,000tpy SC6
Economics	\$2.0bb NPV; \$459mm run-rate EBITDA

QUEBEC PROJECTS (~37% ECONOMIC INTEREST¹)

SYA

Project	Authier + NAL
Location	Abitibi Region, Quebec
Project Stage	DFS to be updated in 2022
Mineral Resources	78.7Mt @ 1.04% Li ₂ O ²
Production / Economics	Being updated

ATLANTIC LITHIUM (EARNING UP TO 50% PROJECT INTEREST³)

ALL

Project	Ewoyaa
Location	Cape Coast, Ghana
Project Stage	Scoping + Exploration
Mineral Resources	21.3Mt @ 1.31% Li ₂ O ⁴
Production	300,000tpy SC6 (50% to PLL) ⁵
Economics	\$789mm NPV; \$70mm capex ⁵

¹ Piedmont owns a 25.0% interest in Sayona Mining's Abitibi Lithium Hub and a 16.5% stake in Sayona Mining, resulting in an effective economic interest of 37.4%.

² Pro-forma 78.7Mt @ 1.04% Li₂O based on Sayona Quebec JORC Code Compliant MRE of 20.94Mt @ 1.01% Li₂O announced on September 24, 2018 and NAL NI 43-101 Compliant MRE of 57.7Mt @ 1.05% Li₂O effective August 24, 2017 and reported by Sayona Mining on September 13, 2021 as a Foreign Mineral Resource Estimate.

³ Piedmont can earn a 50% interest in Atlantic Lithium's Ghanaian lithium portfolio and owns 9.9% of Atlantic Lithium.

⁴ Refer to Atlantic Lithium AIM announcement dated December 1, 2021 for JORC Code Compliant MRE.

⁵ Refer to Atlantic Lithium AIM announcement dated December 7, 2021.

CAROLINA LITHIUM

100% Owned by Piedmont Lithium

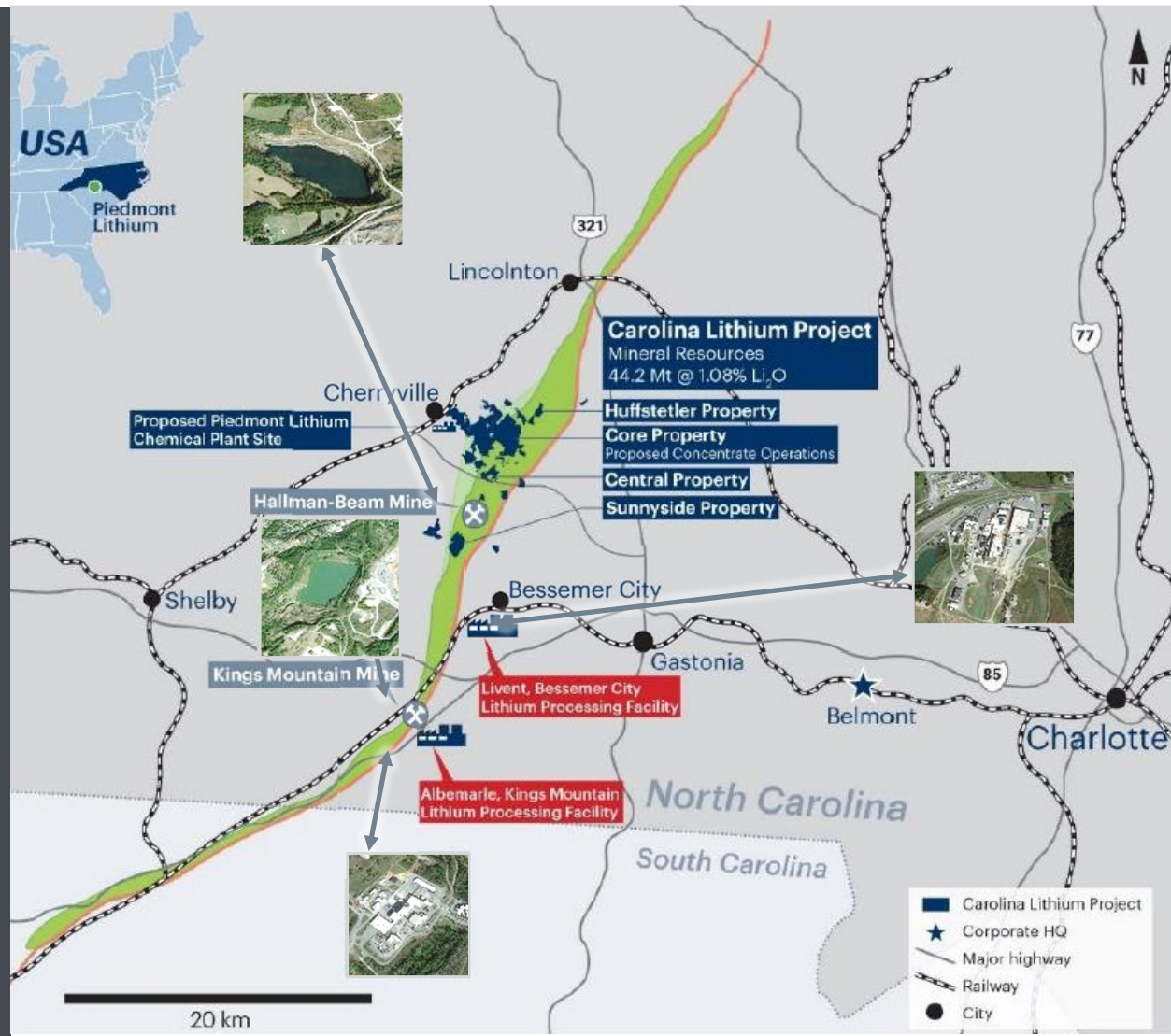
PLL

HIGHLIGHTS

- Located in Gaston County, NC, the cradle of the lithium business
- Strong infrastructure
- Single integrated site
- Skilled local labor
- Proximity to lithium and by-product 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



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	\$3,657/t LiOH
EBITDA	\$450mm first 10 years
After-tax NPV ₈	\$2.0 billion
After-tax IRR	27%
Payback	3.5 years

1: Refer to results of PLL Bankable Feasibility Study announcement dated December 14, 2021. Based on Piedmont estimates prepared pursuant to SEC S K 1300 and the JORC Code.

ABITIBI HUB

Piedmont Owns a 25% Project Interest
and 16.5% Interest in Sayona Mining



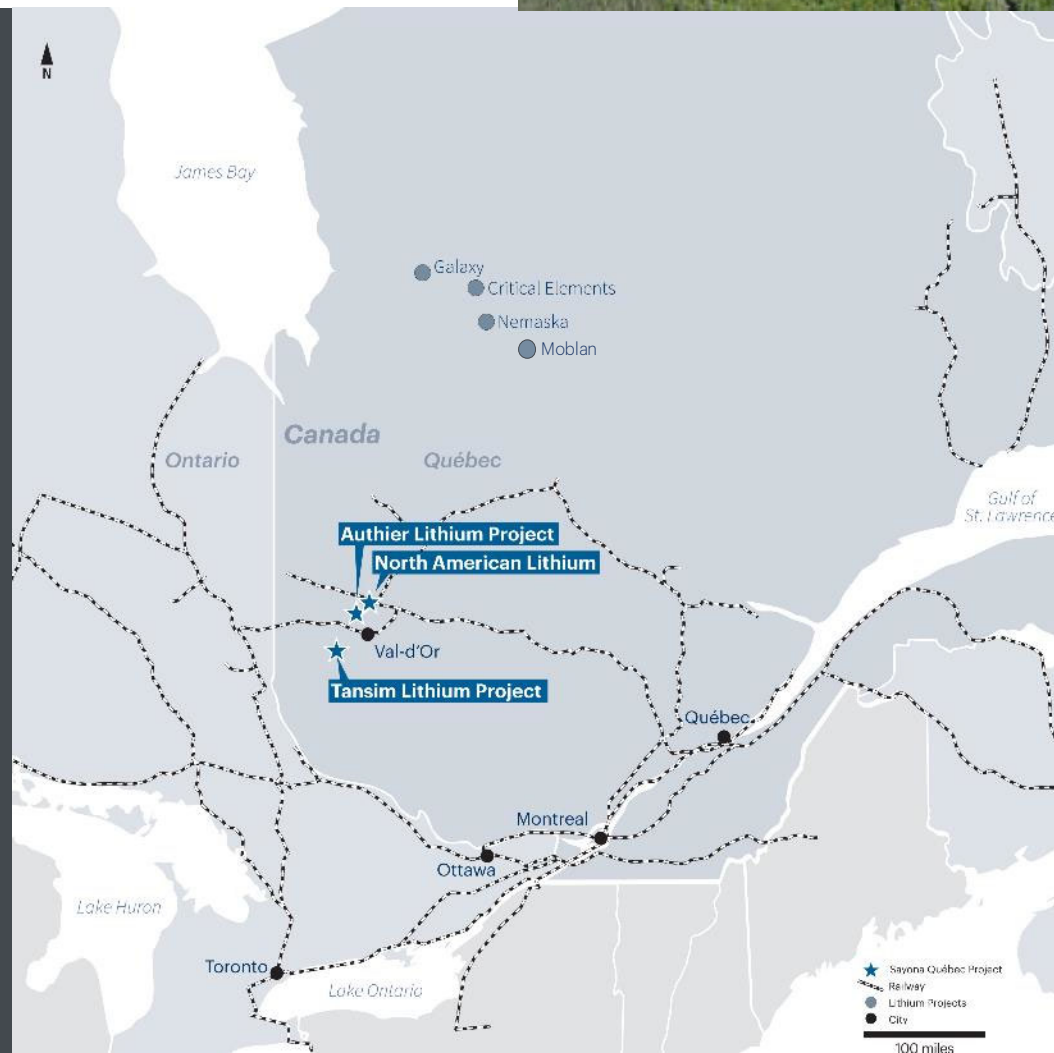
SYA

HIGHLIGHTS

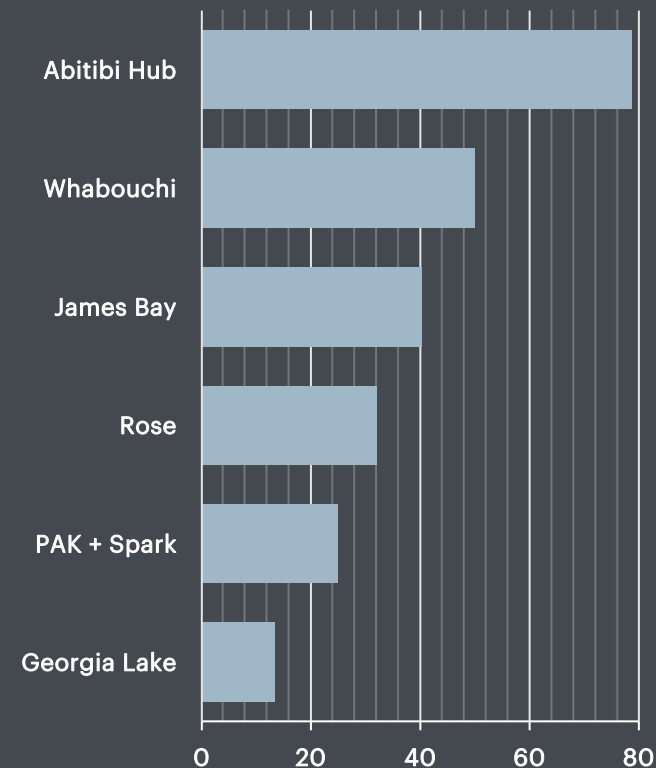
- Among Canada's largest and best-located lithium projects
- NAL is a past-producer with C\$400mm of capital investment
- Good rail and highway infrastructure
- Skilled local labor and contractors
- PLL offtake > of 50% of production or 113,000tpy SC6 – price ceiling \$900/t
- Low-cost renewable hydroelectricity

UPCOMING MILESTONES

- NAL restart decision expected in H1 2022
 - Sayona targeting first production in H1 2023
 - NAL nameplate 180,000tpy SC6
- DFS for integrated NAL/Authier targeted for H1 2022
- Evaluating LiOH production in Quebec



Canadian Spodumene Projects¹



1: Open-pit lithium resources (Mt) from public filings. Sayona / NAL Mineral Resources include Mineral Resources of North American Lithium and are based on Sayona public filings.

ATLANTIC LITHIUM

Piedmont Owns 9.9% of Atlantic Lithium and Can Earn a 50% Interest in ALL's Ghanaian lithium portfolio

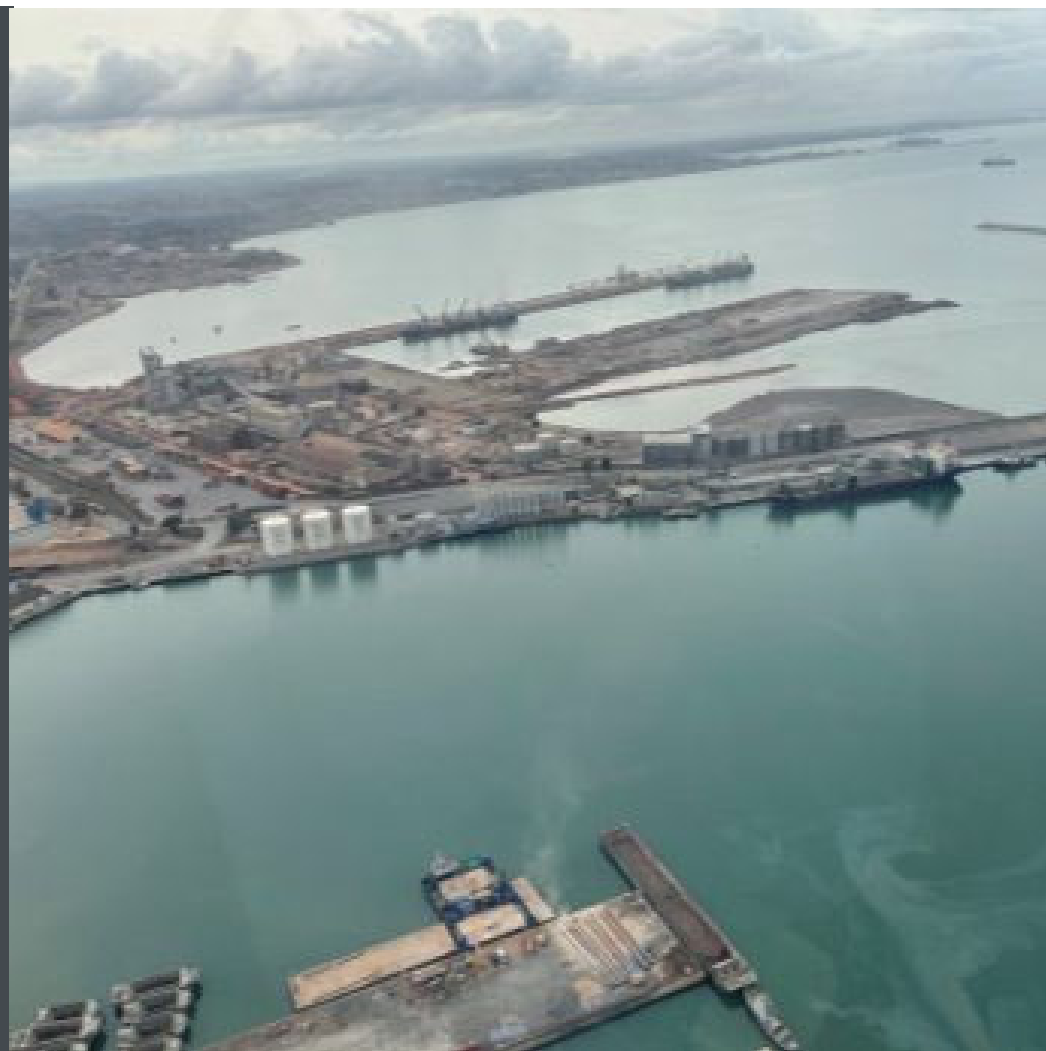
ALL

HIGHLIGHTS

- Mining-friendly jurisdiction
- ~70 miles from major port along national highway
- Short transport to North America for hydroxide conversion
- Coarse-grained spodumene implies low capex DMS flowsheet
- Adjacent hydroelectric powerlines

UPCOMING MILESTONES

- Exploration results and updated mineral resource
- Prefeasibility study expected H1 2022
- Bankable feasibility study expected H2 2022
- Atlantic Lithium targeting first production in H1 2024



FACT SHEET

Location	Ghana
Project Stage	Exploration / Scoping
Business	Spodumene Concentrate
Resources	21.3Mt @ 1.31% Li ₂ O ¹
Production	300,000tpy SC6 ²
PLL Offtake	50% of annual production
DFS Timing	2022-2023
Production	2024-2025
Capex	\$70mm ²
Opex	\$249/t SC6 ²
After-tax NPV ₈	\$789mm ²
After-tax IRR	194% ²

¹ Refer to Atlantic Lithium AIM announcement dated December 1, 2021 for JORC Code Compliant MRE.

² Refer to Atlantic Lithium AIM announcement dated December 7, 2021.



WHY PIEDMONT?

A Premier Lithium Development Company

Strong Lithium Market Fundamentals	<ul style="list-style-type: none">▪ Total Addressable Market for lithium expected to exceed \$50 billion for EV applications by 2030¹▪ EV penetration expected to grow 10x from ~4% in 2020 to over ~40% by 2030▪ Supply/demand imbalance has driven lithium prices to all-time highs
Three Strategic Spodumene Resources	<ul style="list-style-type: none">▪ North Carolina offers favorable infrastructure, talent and proximity to large customers▪ Sayona/NAL investment in Quebec capitalizes on low-cost, sustainable hydroelectricity▪ Atlantic Lithium may provide additional high-quality SC6 to support North American LiOH production
Growth Pipeline with Attractive Economics	<ul style="list-style-type: none">▪ Large spodumene resource base underpins potential growth in lithium hydroxide production▪ \$2.0 billion NPV for Carolina Lithium; low capex expected in Quebec (brownfield) and Ghana (DMS)▪ Economies of scale should be available with additional trains at core LiOH sites
Proven Leadership Team	<ul style="list-style-type: none">▪ Completing permitting, engineering and financing for Carolina Lithium▪ Detailed engineering underway for restart of NAL with first production possible in H1 2023▪ Ewoyaa Feasibility Study expected in Q4 2022 with possible construction decision to follow
Sustainable Business Model	<ul style="list-style-type: none">▪ Targeting low carbon, water and land footprint relative to other conventional lithium projects▪ Expect to utilize renewable solar power in North Carolina and hydro power in Quebec and Ghana▪ Fully-integrated LiOH manufacturing and by-product credits drive low-cost position
Focused on Execution in 2022	<ul style="list-style-type: none">▪ Operational team with large company mining and specialty chemicals experience▪ Experienced people in all senior staff functions▪ Senior leadership focused on driving shareholder value in a responsible way

LiOH



LITHIUM – MADE IN THE USA

Powering America's Clean Energy Transition
Annual Meeting – February 3, 2022

Keith D. Phillips – President and CEO

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Australia Office | 28 The Esplanade | 9th Floor | Perth | WA 6000 | Australia

 Nasdaq:PLL

 ASX:PLL

ARBN 647 286 360

www.piedmontlithium.com

The PLL logo consists of the letters 'PLL' in a bold, dark blue, sans-serif font, centered within a white square. The background of the slide features a faint, blue-tinted image of a car's chassis and suspension system.

PLL

PIEDMONT
LITHIUM

ANNUAL MEETING OF SHAREHOLDERS
January 11, 2022

MEETING CLOSED

Thank You