



LITHIUM – MADE IN THE USA

Helping Secure America's Energy Independence

 Nasdaq :PLL

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ARBN 647 286 360

LiOH

October 13, 2022

NASEO 2022 Annual Meeting

DISCLAIMERS

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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; 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.

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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.

DISCLAIMERS



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.

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A public offering is being made pursuant to an effective shelf registration statement that has been filed with the U.S. Securities and Exchange Commission (the “SEC”). A preliminary prospectus supplement related to the offering of the securities has been filed with the SEC and is available on the SEC’s website at <http://www.sec.gov> and on the ASX website. Copies of the preliminary prospectus supplement and the accompanying prospectus relating to the public offering may be obtained from J.P. Morgan Securities LLC, c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, by telephone at (866) 803-9204 or by e-mail at prospectus-eq_fi@jpmchase.com; and Evercore Group L.L.C., Attention: Equity Capital Markets, 55 East 52nd Street, 35th Floor, New York, NY 10055, by telephone at (888)474-0200 or by e-mail at ecm.prospectus@evercore.com.

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PROJECTS



CAROLINA LITHIUM (100% OWNERSHIP¹)

CL

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

TENNESSEE LITHIUM (100% OWNERSHIP¹)

TN

Project	Tennessee Lithium
Location	TBD, U.S.
Project Stage	Preliminary Economic Assessment
Production	30,000tpy LiOH
Economics	\$2.2bb NPV; \$346mm run-rate EBITDA

QUEBEC (~35% ECONOMIC INTEREST²)

SYA

Project	Authier + NAL
Location	Abitibi Region, Quebec, Canada
Project Stage	Pre-Feasibility
Mineral Resources	119.1Mt @ 1.05% Li ₂ O ³
Production	168,000tpy SC6 ⁴
Economics	\$571mm NPV; \$80mm capex ⁴

GHANA (EARN-IN OF 50% PROJECT INTEREST⁵)

ALL

Project	Ewoyaa
Location	Cape Coast, Ghana
Project Stage	Scoping + Exploration
Mineral Resources	30.1Mt @ 1.26% Li ₂ O ⁶
Production	300,000tpy SC6 (50% to PLL) ⁷
Economics	\$789mm NPV; \$70mm capex ⁷

¹ Refer to Piedmont Lithium press release dated March 9, 2022. Financial results for Carolina Lithium are indicative Company estimates not independently verified by the Qualified Persons.

² Piedmont owns a 25.0% interest in Sayona Quebec and a 14.4% stake in Sayona Mining, resulting in an effective economic interest of ~35% in the Abitibi Lithium Hub.

³ Refer to Sayona Mining ASX announcement dated March 1, 2022 for JORC Code Compliant MRE.

⁴ Refer to Sayona Mining ASX announcement dated May 23, 2022 for results of NAL Pre-Feasibility Study.

⁵ Piedmont can earn a 50% interest in Atlantic Lithium's Ghanaian lithium portfolio and owns 9.9% of Atlantic Lithium.

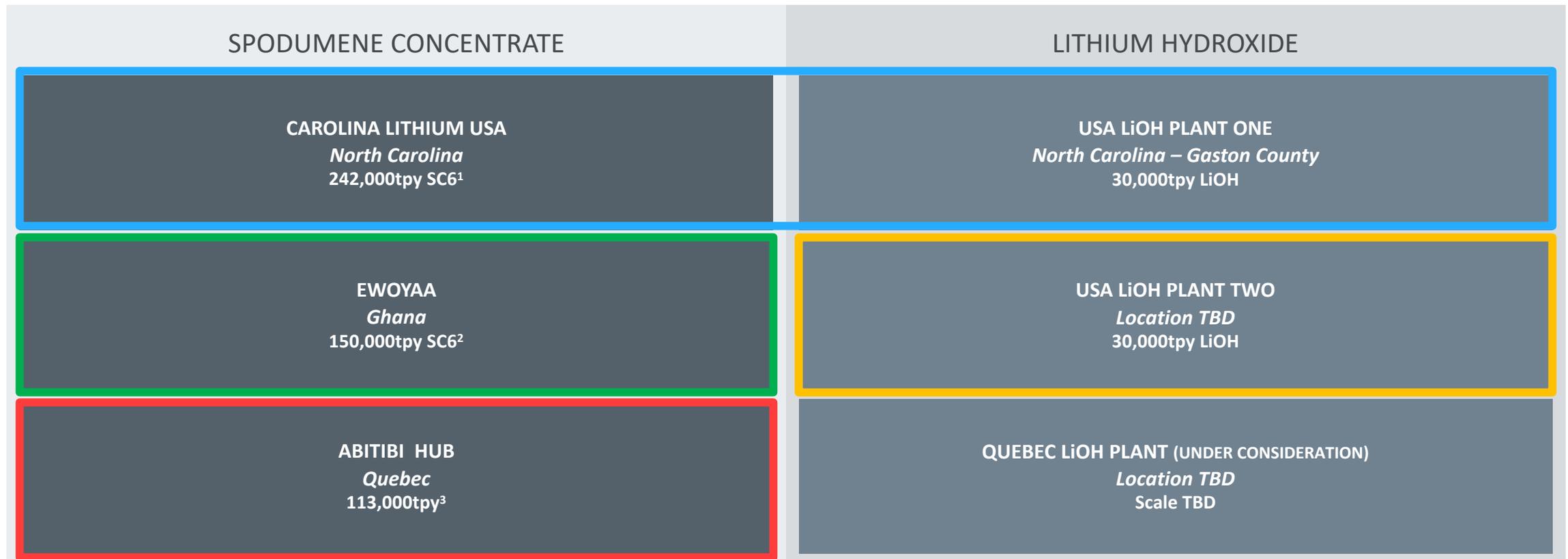
⁶ Refer to Atlantic Lithium AIM announcement dated March 24, 2022 for JORC Code Compliant MRE.

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



OUR ASSETS

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



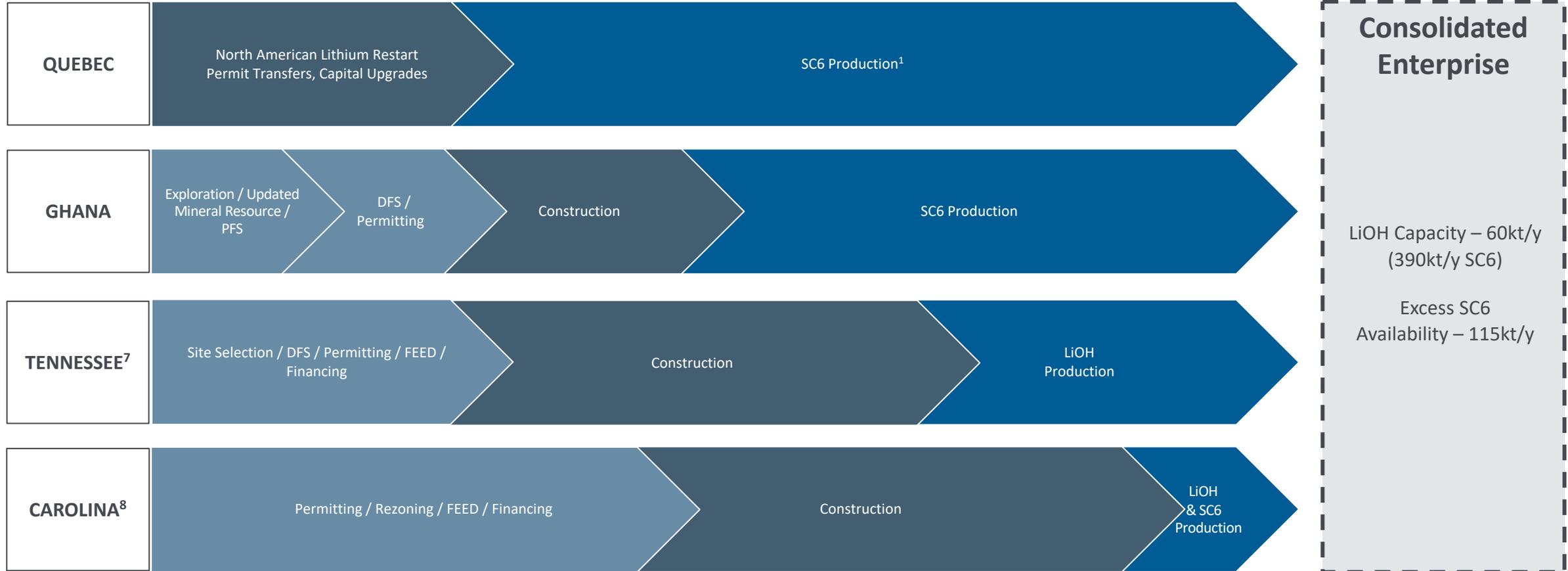
1: Annual spodumene concentrate production per Bankable Feasibility Study Results released December 14, 2021.

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.



DEVELOPMENT PROGRESSION



1. Initial SC6 production from the restart of the North American Lithium mine. Additional potential spodumene ore production from Authier and potential LiOH production from Quebec are the subject of ongoing technical studies.

QUEBEC

NAL Restart Contemplated for H1 2023



SYA

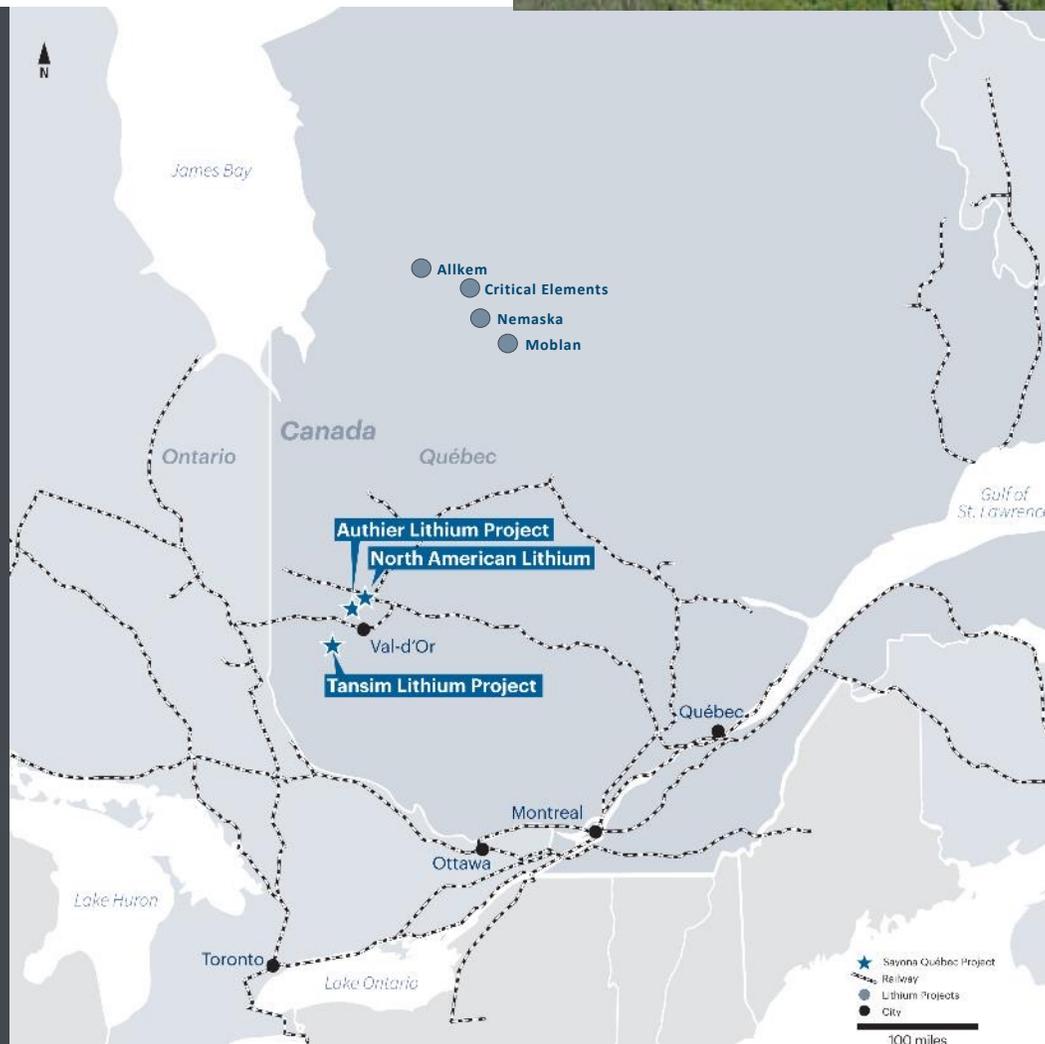
HIGHLIGHTS

- Piedmont owns a 25% project interest in Sayona Quebec and a 14.4% equity interest in Sayona Mining
- 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
- Potential for near-term SC6 production in North America with attractive offtake economics
- Low-cost renewable hydroelectricity

UPCOMING MILESTONES

- NAL restart decision
- Technical studies for integrated NAL/Authier targeted for H1 2022
- Evaluating LiOH production in Quebec

7



FACT SHEET

Location	Québec
Project Stage	Pre-Feasibility
Business	Spodumene Concentrate
Resources	119.0Mt @ 1.05% Li ₂ O ¹
Production	168,000tpy SC6 ²
PLL Offtake	Greater of 50% of production or 113,000tpy ³
Offtake Price	Price Floor: \$500/t Price Ceiling: \$900/t ³
Production	2023
Capex	\$80mm ²
Opex	\$590/t SC6 ²
After-tax NPV ₈	\$571mm ²

1. 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.
2. See Sayona Mining ASX announcement dated May 23, 2022 for NAL pre-feasibility announcement.
3. Refer to Piedmont's ASX announcement dated January 11, 2021 for supply agreement terms.

GHANA

Atlantic Lithium Targeting First Production in 2024



HIGHLIGHTS

- Piedmont owns 9.9% of Atlantic Lithium and can earn a 50% interest in ALL's Ghanaian lithium portfolio
- 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
- Feasibility study expected Q3 2022



FACT SHEET

Location	Ghana
Project Stage	Exploration / Scoping
Business	Spodumene Concentrate
Resources	30.1Mt @ 1.26% 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 March 24, 2022 for JORC Code Compliant MRE.

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

TENNESSEE LITHIUM

100% Owned by Piedmont Lithium



TN

HIGHLIGHTS

- 30,000tpy LiOH Production
- Merchant plant fed by market sources, including offtake agreements with Sayona Quebec and Atlantic Lithium
- Common physical and operating characteristics of Carolina Lithium Plant
- Features Metso:Outotec conversion technology

UPCOMING MILESTONES

- Site selection
- EPC contractor selection
- Feasibility study
- Permitting
- Project financing
 - Strategic partnering
 - ATVM loan



FACT SHEET¹

Location	Etowah, TN (McMinn County)
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.

CAROLINA

100% Owned by Piedmont Lithium

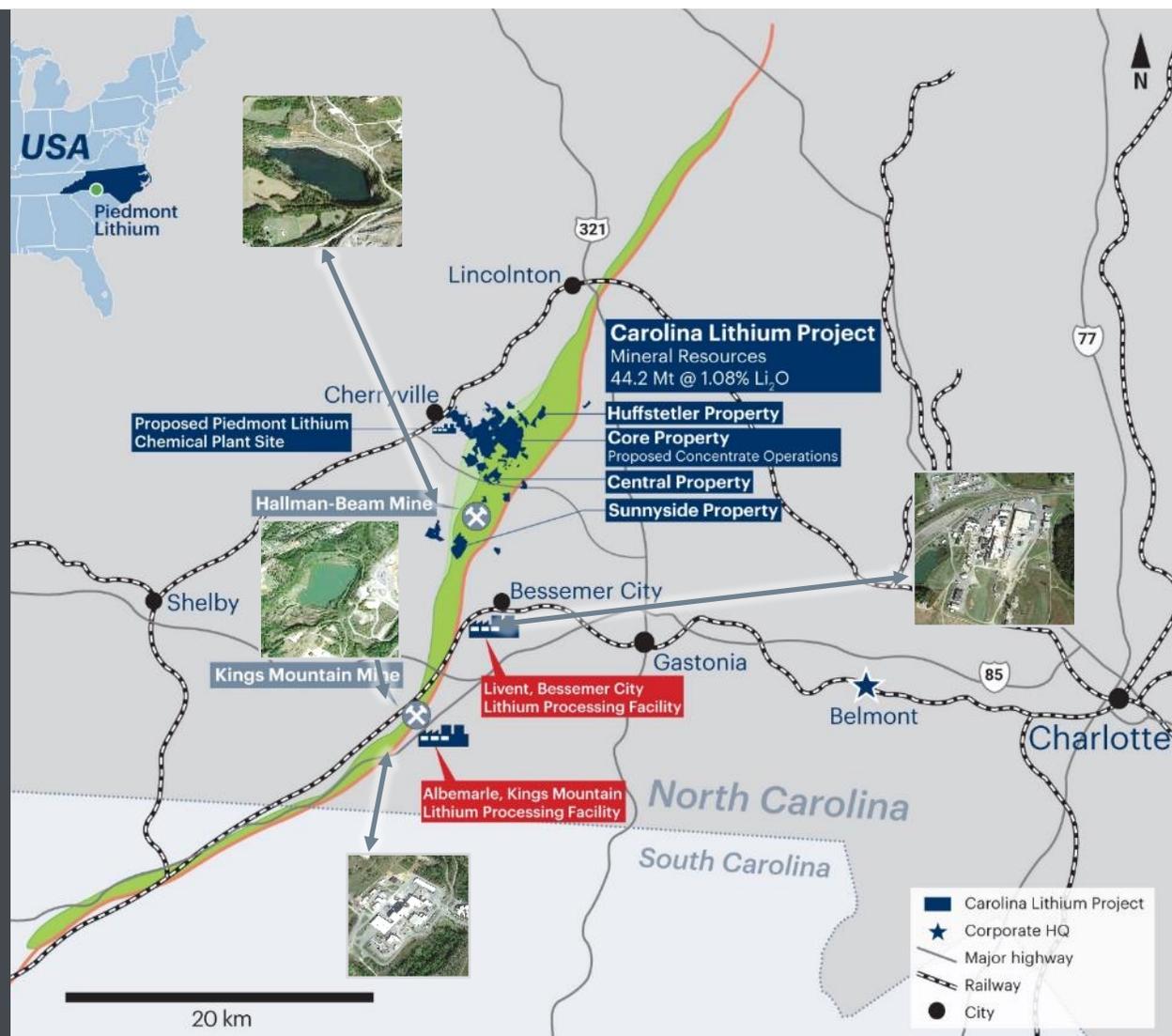


HIGHLIGHTS

- 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



FACT SHEET¹

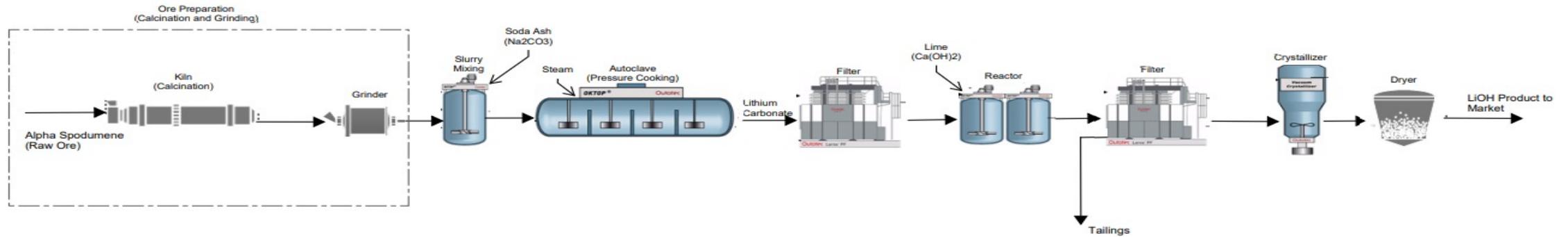
Location	North Carolina, USA
Project Stage	Feasibility Study
Product	Lithium Hydroxide
Resources	44.2Mt @ 1.08% Li ₂ O
Production	30,000tpy LiOH
Feedstock	242,000tpy SC6
Capex	\$988 million
Opex	\$4,377/t LiOH
EBITDA	\$592mm first 10 years
After-tax NPV ₈	\$2.8 billion
After-tax IRR	34%
Payback	2.9 years

1: 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.

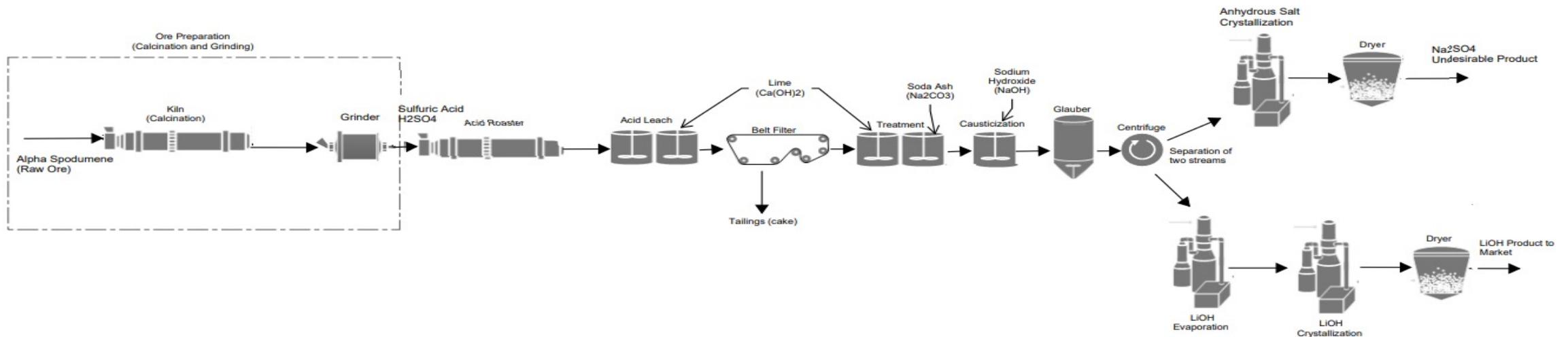
TECHNOLOGY AND MANUFACTURING

LiOH Conversion Process - Pressure Leach vs. Acid Roast

Pressure Leach Process



Acid Roast Process



UNITED STATES GOVERNMENT POLICY

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

Inflation Reduction Act

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

- 45X – Advanced Manufacturing Credit
 - New investment tax credit equal to 10% of annual production costs
 - Available to US taxpayers with US-based critical minerals projects
 - Also provides a \$35/kWh tax credit for USA battery plants
- 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 – a \$40,000 (max) credit for commercial vehicles weighing > 14,000 pounds

Department of Energy

ATVM Loan Programs
Battery Materials Grant Programs

- Low-interest 'Advanced Technology Vehicle Manufacturing' loans for qualified projects
 - PLL has applied for Tennessee Lithium and Carolina Lithium
- Piedmont has applied for a grant under the Bipartisan Infrastructure Law

Department of Defense

- Defense Production Act Title III enacted to increase domestic mining and processing of critical materials for the battery supply chain

State EV Mandates

- California and other states banning the sale of new ICE vehicles by 2035

LiOH

PIEDMONT
LITHIUM

PIEDMONT LITHIUM INC.

October 13, 2022

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