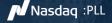


# LITHIUM – MADE IN THE USA

Helping Secure America's Energy Security 2023 Macquarie Australia Conference





ARBN 647 286 360



### **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 Piedmont Lithium, Sayona Mining and Atlantic Lithium; current plans for mineral and chemical processing projects of Piedmont and its partners); projections of market demand and prices; statements about the timing and amount of reserve and resource declarations and 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 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 to Tesla, LG Chem or otherwise, (ii) in that the properties of Piedmont or its partners may not contain expected reserves or resources, (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 acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mining's or Atlantic Lithium's ability to obtain required acpital to execute their business plans, (v) Piedmont's, Sayona Mi

#### **Qualified Persons Statement**

We have reported mineral reserves, which were prepared in accordance with Regulation S-K Item 1300 (as promulgated by the SEC, "S-K 1300")) and the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code") (as required by the ASX), in connection with our exploration and evaluation activities. As of December 31, 2022, we reported 18.3 million metric tons of probable mineral reserves at a grade of 1.10% Li<sub>2</sub>O. We issued our first mineral resource estimate pursuant to S-K 1300 and the JORC Code on October 21, 2021 and have not finalized any subsequent estimates. The proven and probable reserve figures presented herein are estimates based on information available at the time of calculation.

The mineral resource figures presented herein are estimates based on information available at the time of calculation and do not include that portion of our mineral resources that been converted to proven and probable reserves as shown above, as they are reported exclusive of mineral reserves. We have reported mineral resources, prepared in accordance with S-K 1300, as part of our exploration and evaluation activities. As of December 31, 2022, we have reported 25.89 million metric tons of mineral resources, exclusive of mineral reserves, at a grade of 1.06% Li<sub>2</sub>O.

An initial Technical Report Summary with respect to our estimated mineral reserves was filed as an exhibit to our Transition Report for the six-month period ending December 31, 2021. An Amended Technical Report Summary, dated April 20, 2023 (the "Amended TRS"), was filed as Exhibit 96.3 to our most recent Form 10-K/A to include certain information as required by S-K 1300. Key assumptions and parameters relating to our estimates of mineral reserves and resources are discussed in Sections 1.9 and 1.10 of the Amended TRS. We intend to publish reserves annually and recalculate reserves if any new significant changes are expected, taking into account metal prices, changes to estimates of future production and costs, divestments and depletion, as well as any acquisitions and additions.

As required by ASX Listing Rules, Piedmont confirms that: a) it is not aware of any new information or data that materially affects the information included in our most recent form 10-K/A; b) all material assumptions and technical parameters underpinning mineral reserves, mineral resources, production targets, and related forecast financial information derived from production targets included in our form 10-K/A continue to apply and have not materially changed; and c) the form and context in which the relevant Qualified Persons' findings are presented in this report have not been materially modified from the Amended TRS.

Nasdaq : PLL





### **DISCLAIMERS**

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

#### Standards for Assessing Mineral Reserves and Resources

As a U.S. public company listed in the United States and Australia, Piedmont is required to comply with the resource estimation standards of both S-K 1300 and the JORC Code. Certain of Piedmont's partners instead comply with the JORC Code or Canadian National Instrument 43-101, Standards of Disclosure for Mineral Projects ("NI 43-101").

Each of these standards contain specific meanings for terms such as "mineral resource", "measured mineral resource" indicated mineral resource" and "inferred mineral resource" indicated mineral resource, including subcategories of measured, indicated and inferred resources, are broadly similar under each set of standards, we caution you that estimates prepared solely under the JORC Code or NI 43-101 are not fully comparable to similarly titled measures disclosed under S-K 1300 or the other reporting and disclosure requirements of the U.S. federal securities laws, rules and regulations.

#### Mineral Reserves and Resources of Piedmont

Mineral reserve and mineral resource information contained in this presentation for the Carolina Lithium Project was prepared by Piedmont in accordance with S-K 1300 and the JORC Code.

#### Mineral Reserves and Resources of Sayona Quebec

Mineral reserve and mineral resource information contained in this presentation for the Authier and North American Lithium Projects was prepared by Sayona in accordance with the JORC Code and NI 43-101. Such information was not prepared in accordance with S-K 1300.

#### Mineral Reserves and Resources of Atlantic Lithium

Mineral reserve and mineral resource information contained in this presentation for the Ewoyaa Project was prepared by Atlantic Lithium in accordance with the JORC Code. Such information was not prepared in accordance with S-K 1300.

In September 2022, Atlantic Lithium announced the successful completion of a technical study for Ewoyaa in accordance with the JORC Code, demonstrating the potential of Ewoyaa to produce low-cost spodumene concentrate using a dense medium only processing technique. In the Atlantic Lithium technical study, 24.5% of the mined tons reported in the production target was based on the inclusion of inferred resources. There is a low level of geological confidence associated with inferred mineral resources, and there is no certainty that further exploration work would result in a determination of measured or indicated mineral resources resulting from the inferred resources, that the inferred resources would be converted to mineral reserves or that the production target itself would be realized. Although Atlantic Lithium has characterized this technical study as a prefeasibility study, due to the inclusion of the inferred resources, we consider the production target and its associated economics as a scoping study.







# WHY PIEDMONT?

Onshoring to the United States

**U.S. Government EV Focus** 

**Near-Term Cash Flow Potential** 

**Strong Commercial Agreements** 

Large Spodumene Resource Base

Downstream Integration to Hydroxide

**Diversification by Project and Geography** 

# **CORPORATE SNAPSHOT**

PIEDMONT LITHIUM	Nasdaq	<b>M</b> ASX
Shares / CDIs Outstanding (100 CDIs = 1 Share)	19.18 mm	1,918.2 mm
Price (@ 4/28/23)	\$57.50	A\$0.86
Average Daily Trading Volume (90-day)	\$28 mm	A\$2 mm
Market Cap (@ 4/28/23)	\$1.1 bb	A\$1.6 bb
Cash (Est. 3/31/23)	\$129 mm	A\$196 mm
Equity Interests at Market (@ 4/28/23)	\$185 mm	A\$279 mm

#### **RESEARCH COVERAGE**





CANACCORD Genuity















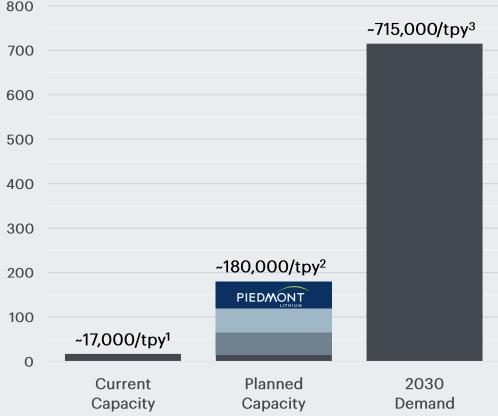
TUOHY BROTHERS
INVESTMENT RESEARCH INC

# SHORTFALLS ANTICIPATED IN THE U.S.

U.S. Battery Plants Expected to Require >40x1 Current U.S. Lithium Hydroxide Capacity

#### SELECTED U.S. GIGAFACTORIES **HONDA (1)** LG Energy Solution ultium **=** cells STELLANTIS ( LG Energy Solution 800 40 GWh facility in Fayette County, Ohio 35 GWh LFP battery cell facility in Marshall, Michigan. 40 GWh battery cell facility in Lordstown, Ohio. 35 GWh plant in Ohio, and 50 GWh plants in Tennessee and Michigan **iM3NY** 700 **(1)** LG Energy Solution Capacity of 1 GWh and expandable to more than 15 GWh Expanding a 5 GWh plant in Holland, Michigan to 40 GWh 600 **Panasonic** Expected to be 50 GWh in To produce 129 GWh annually in 500 De Soto, Kansas Kentucky and Tennessee. **TOYOTA** TESLA 400 To build a ≈30 GWh battery cell facility in Greensboro, NC. Two operational plants with ≈44 GWh in Nevada. Working to open Gigafactory Texas and has a pilot line in Fremont, California. 300 VINFAST First North American plant in North **LG** Energy Solution Carolina, with production by 2024. PIEDMONT 200 Tennessee PIEDMONT 11 GWh cylindrical battery plant in Queen Creek, Arizona, Carolina STELEANTIS SAMSUNG SDI 100 Multi-year partnership to provide battery 33 GWh battery cell facility in Kokomo, cells. First 30 GWh plant in South Carolina. ~17,000/tpy1 0 **SAMSUNG SDI** HYUNDAI Current Joint venture building 35 GWh Two plants in Georgia with initial Announced joint venture will build 30 GWh factory in Bartow county, Georgia capacities of ≈10 and ≈12 GWh and the Capacity factory opening in 2026. Location TBD. potential to increase beyond 25 GWh. **G**FREYR 34 GWh battery cell manufacturing in Coweta County, Georgia.

### ANNOUNCED ANNUAL GIGAFACTORY DEMAND AND **US LIOH SUPPLY CAPACITY BY 2030**



- Based on current US capacity of 17k tonnes per year ("tpy") and announced gigafactory demand of 715k tpy.
- Estimated supply based on existing capacity, supplier technical studies, and corporate announcements
- Estimated demand is estimated based on a 0.9 Mt LiOH intensity per MWh of demand.

# **U.S. GOVERNMENT EV FOCUS**

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

### DEPARTMENT OF ENERGY

Battery Materials Grant Programs
Advanced Technology Vehicle Manufacturing Loans

### INFLATION REDUCTION ACT

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

- Piedmont selected for \$141.7 million grant for Tennessee Lithium<sup>4</sup>
  - Grant to be funded alongside Piedmont project equity contributions
- ATVM loan applications submitted<sup>5</sup>
  - Historically, long-term loans at US Treasuries flat<sup>6</sup>

- 45X Advanced Manufacturing Production Credit
  - Production tax credit equal to 10% of annual production costs
  - Available only to U.S. taxpayers
  - Credits are tradeable
- 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 provides up to \$40,000 credit for large commercial vehicles







# **LOCATION MATTERS!**



#### **UNITED STATES**

- US domicile improves access to US capital markets
- Russell 2000 inclusion / over 20% of PLL shares held by Index Funds
- Well-positioned to benefit from the IRA and other US government programs
- Southeastern United States has become the "Battery Belt"

#### **QUEBEC**

- Based near Val-d'Or, a major mining service center
- No requirement for fly-in/fly-out labor
- Reliable, clean and sustainable hydropower
- Proximity to rail network to access St. Lawrence Seaway and US markets

#### **GHANA**

- Project site is 1km from a paved road and 110km from port at Takoradi
- Hydro and solar power proximate to site
- Strong national employment, training programs, and community engagement
- Mining friendly jurisdiction mining is the largest tax-paying sector in the country<sup>7</sup>

#### **TENNESSEE**

- Near planned and existing cathode, battery, and automotive plants
- Development-ready site located near rail, highways and waterways
- Strong local workforce, business climate and government support

#### **CAROLINA**

- Located on the Carolina Tin-Spodumene Belt in Gaston County, NC
- Single integrated site
- Outstanding transport and power infrastructure
- Proximity to lithium and byproduct markets
- 7. According to the U.S. Department of Commerce's Country Commercial Guide for Ghana

# PIEDMONT PROJECT PORTFOLIO

# Quebec<sup>8</sup>

Ownership: 25% Piedmont / 75% Sayona Mining Piedmont owns 13.6% of Sayona Mining

#### Project 9 **Authier + NAL**

Abitibi, Quebec, Canada Location 32.9Mt @ 1.04% Li<sub>2</sub>O Reserves Year 1-4: 226,000tpy SC Production LOM: 190,000tpy SC (113,000tpy to PLL) \$1.0bb after-tax NPV Economics \$80mm capex

### Ghana<sup>10</sup>

Ownership: 50% Piedmont / 50% Atlantic Lithium

#### Project 11 Ewoyaa

Cape Coast, Ghana Location Reserves 18.9Mt @ 1.24% Li<sub>2</sub>O 255,000tpy SC6 Production (50% to PLL) \$1.3bb after-tax NPV **Economics** \$125mm capex

### Tennessee

### Carolina

**Carolina Lithium** 

roject <sup>12</sup>	Tennessee Lithium	Project <sup>13</sup>
----------------------	-------------------	-----------------------

Location	McMinn County, TN	Location	Gaston County, NC
Reserves	N/A	Reserves	18.3Mt @ 1.10% Li <sub>2</sub> O
Production	30,000tpy LiOH	Production	30,000tpy LiOH; 242,000tpy SC6
Economics	\$2.5bb after-tax NPV \$376mm steady state EBITDA	Economics	\$2.0bb after-tax NPV \$459mm steady state EBITDA

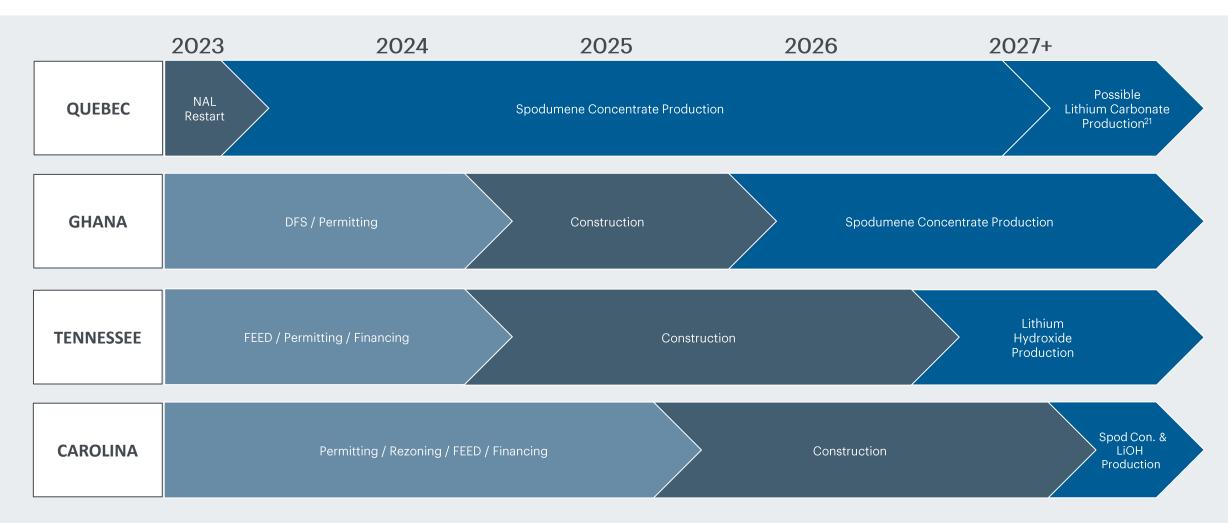
# PIEDMONT SHARE OF ANNUAL MARKETABLE CAPACITY

Illustrative Share of Production<sup>14</sup>

		2023	2024	2025	2026	2027+
	Sayona Quebec <sup>15</sup>	56,500	113,000	113,000	113,000	113,000
e te	Atlantic Lithium <sup>16</sup>	-	-	127,500	127,500	127,500
ımer ıntra	Carolina Lithium <sup>17</sup>	-	-	-	-	242,000
Spodumene Concentrate	Produced	56,500	113,000	240,500	240,500	482,500
SC	SC6 Feedstock for Conversion <sup>18</sup>	-	-	-	195,000	390,000
	Spodumene Concentrate Available for Sale	56,500	113,000	240,500	45,500	92,500
Ø	LiOH – Tennessee Lithium <sup>19</sup>	-	-	-	30,000	30,000
Lithium hemicals	LiOH – Carolina Lithium <sup>17</sup>	-	-	-	-	30,000
Lithium hemica	Li <sub>2</sub> CO <sub>3</sub> – Sayona Quebec <sup>20</sup>	-	-	-	-	tbd
O	LiOH Available for Sale	-	-	-	30,000	60,000

# FIRST PRODUCTION ACHIEVED Q1 2023

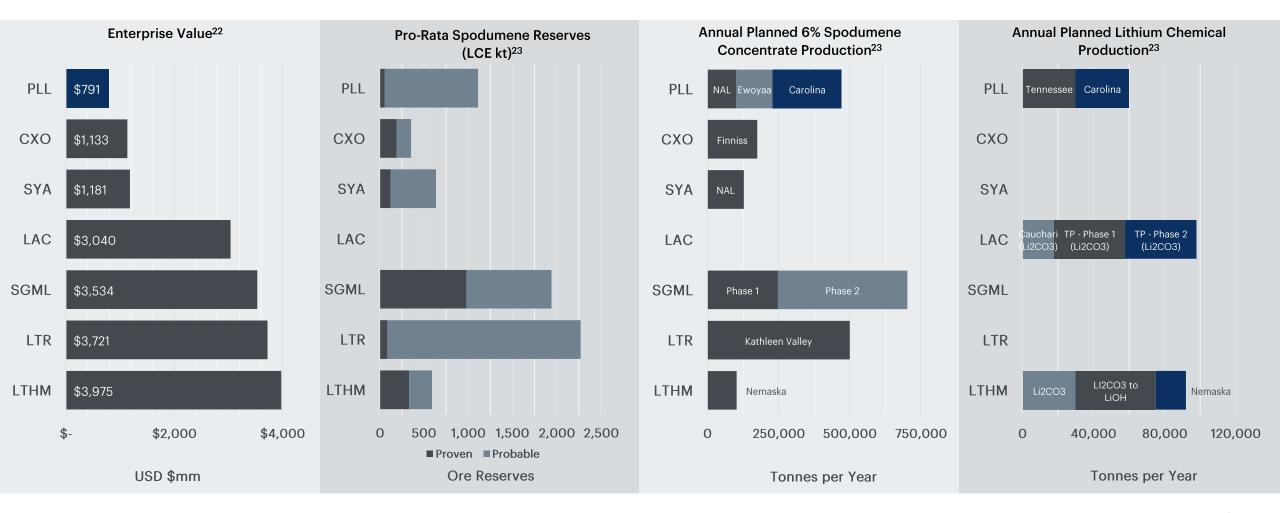
Indicative Timelines – Actual Timelines Remain Subject to Permitting and Funding



<sup>21.</sup> Potential lithium carbonate or lithium hydroxide production from Quebec is the subject of further technical studies. Sayona Mining is undertaking a prefeasibility study to complete the partially-constructed lithium carbonate plant at the North American Lithium facility. PFS expected in Q2 2023.

# PEER BENCHMARKING

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



<sup>22.</sup> Enterprise Values consist of market capitalization, total debt, minority interests, preferred stock, and convertible preferred stock less cash and short-term investments. Data is sourced from Factset as of April 28, 2023 and shown in US\$mm.

23. Figures are based on disclosed resource updates and average life of mine production estimates. Production estimates may include the use of inferred resources. Proportional rights and offtake agreements are reflected. Note that projects for which technical studies have not been completed are excluded. See Peer Project Notes for additional disclosures surrounding production estimates and supporting studies.

# NAL RESTART COMPLETED

Restart Completed in March as Scheduled; DFS Published in April

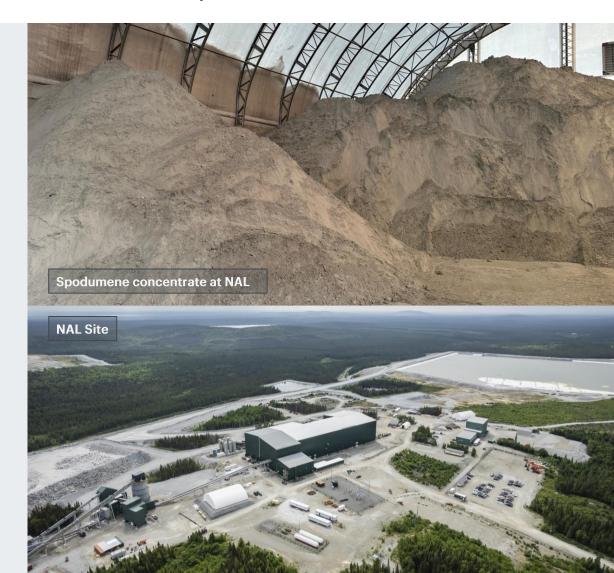
### **NAL RESTART<sup>24</sup>**

- Only major new source of spodumene concentrate expected in North America in the near-term
- Commercial operations commenced with deliveries to Port of Quebec City ongoing
- First commercial shipment to customers targeted for Q3 2023
- Continued upgrades underway to improve operational efficiency, reliability, grade, quality, and recoveries

### **DEFINITIVE FEASIBILITY STUDY**<sup>25</sup>

- Production target increased to 226,000 tonnes per year for first four years of operation and 190,000 tpy thereafter
- Included strategic review of Mineral Resource and Reserves resulting in increased head grade
- PFS for completion of on-site carbonate refinery to be completed in Q2 2023

<sup>25.</sup> See Sayona Mining ASX announcement "DFS Confirms NAL Value with A\$2.2B NPV" dated April 14, 2023, a copy of which can be found on Sayona Mining's website.



<sup>24.</sup> See Piedmont announcement "Sayona Mining and Piedmont Lithium Announce Successful Restart of North American Lithium" dated March 30, 2023, a copy of which can be found on our Company website or in our SEC filings.

# **COMMERCIAL ARRANGEMENTS**

Piedmont will Sell Spodumene Concentrate Until Conversion Plants are Operational

### PIEDMONT AS CUSTOMER



### 113,000TPY SC - LOM<sup>26</sup>

- > 113,000tpy or 50% of production
- Market price subject to floor & ceiling
- Floor \$500/t; ceiling \$900/t SC6
- Life of mine
- Secondary feedstock for Tennessee
- Evaluating options for conversion in Quebec



### ~127,500TPY SC - LOM<sup>27</sup>

- 50% of Ghanaian production
- Market pricing
- Life of mine
- Primary feedstock for Tennessee

# **PIEDMONT AS SUPPLIER**



### 200,000T SC - 4 YEARS<sup>28</sup>

- 50,000tpy commencing H2 2023
- Priced with reference to Fastmarkets SC6 pricing
- To be supplied via SYQ offtake

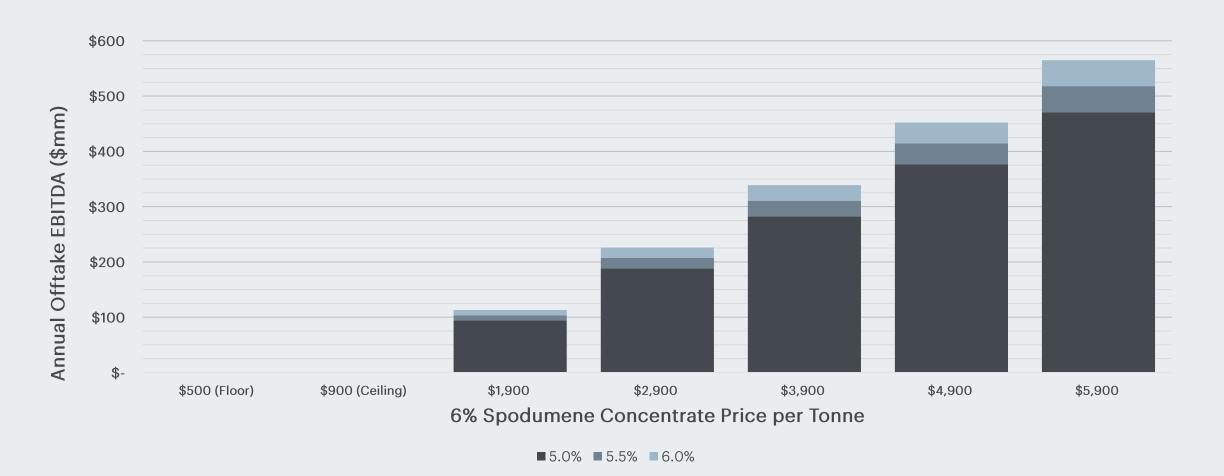


### **125,000**T SC – 3 YEARS<sup>29</sup>

- First shipment planned for late-2023
- Priced with reference to Fastmarkets LiOH pricing
- To be supplied via SYQ offtake

# ILLUSTRATIVE POTENTIAL CASH FLOW FROM NAL OFFTAKE

Piedmont's Offtake Agreement is for the Greater of 113ktpy or 50% of Production for Life of Mine







# **FUNDING OUR GROWTH**

Objective – Maximize Growth While Minimizing Equity Dilution

## **BALANCE SHEET**

- \$129mm estimated cash at 3/31/23
- \$185mm equity value in shares of Sayona Mining and Atlantic Lithium

### **OPERATING CASH FLOW**

- Successful NAL restart in Q1 2023 with first shipments targeted for Q3 2023
- As customer, Piedmont will buy SC at ceiling price of \$900/t and sell to customers
- As investor, Piedmont will earn 25% of joint venture profits

## **GOVERNMENT PROGRAMS**

- \$142mm DOE grant for Tennessee<sup>30</sup>
- ATVM applications submitted for Tennessee and Carolina<sup>31</sup>
- Evaluating development financing options for Ghana

### **CUSTOMER FINANCING**

- Discussions underway with prospective strategic partners
- Structures may include offtake prepays, loans, joint ventures, or equity investments
- Funding availability will drive timing of Tennessee development







<sup>30.</sup> Grant funding subject to finalization of terms and conditions between Piedmont Lithium and the U.S. Department of Energy.

<sup>31.</sup> As a result of our grant award, our eligibility for an ATVM loan for Tennessee Lithium may be reduced or we may elect not to pursue an ATVM loan for the Tennessee Lithium Project.

# **ACCOMPLISHMENTS / MILESTONES**

# Piedmont Lithium Development Plans are On Track

#### 2023 MILESTONES AND ACCOMPLISHMENTS RECENT ACCOMPLISHMENTS **M** Quebec ☐ Quebec On-sale of PLL's 113,000tpy spodumene concentrate offtake ☑ Updated Ore Reserves at NAL of 21.7Mt @ 1.08% Li<sub>2</sub>O<sup>32</sup> First spodumene concentrate production expected in H1 2023 Positive PFS for restart of NAL mine/concentrator First shipments and revenue expected H2 2023 ✓ Strong enhancement to construction and operations teams **G**hana ☐ Ghana Ore Reserves estimated at 18.9Mt @ 1.24% Li<sub>2</sub>0<sup>33</sup> Resource update ■ Ewoyaa PFS published indicating \$1.3bb NPV and 224% IRR<sup>33</sup> Definitive Feasibility Study ✓ Mining license application submitted October 2022 Mining License Tennessee Lithium Tennessee Selection of Etowah, TN as site for 30,000tpy LiOH plant Definitive Feasibility Study Kiewit / Primero to perform Front-End Engineering Design Lithium hydroxide offtake \$142mm DOE grant award announced October 2022 Project finance Carolina Lithium ☐ Carolina Permitting processes ongoing Mine permit ☑ Community outreach ongoing Air permit ✓ Completion of funding of committed land purchases ■ Land rezoning **M** Corporate Corporate ✓ Strong additions to technical and corporate teams Continue to expand engineering team Piedmont added to Russell 2000 Small Cap Index Strategic partnerships and project financing \$122mm (net) equity offering to fund project development Evaluate consolidation opportunities

<sup>32.</sup> Refer to Sayona Mining ASX announcement "DFS Confirms NAL Value with A\$2.2B NPV" dated April 14, 2023, a copy of which can be found on Sayona Mining's website.

<sup>33.</sup> Production target and economics include the use of inferred mineral resources which have a low level of geological confidence and as such we consider them to be at a scoping study level. Refer to cautionary note on page 3 of this presentation. See Atlantic Lithium announcement "Pre-Feasibility Study Delivers Robust Project Economics" dated September 22, 2022, a copy of which can be found on Atlantic Lithium's website.

# PEER PROJECT NOTES

Company	Project	Ownership	Study Level <sup>34</sup>	Annual SC Production	Annual Lithium Chemical Production	Pro-rata Production	Source
Piedmont Lithium	Sayona Quebec <sup>35</sup>	25%	DFS	> 113,000 or 50% of production		113,000	ASX Announcement - DFS Confirms NAL value with A\$2.2B NPV, April 14, 2023
Piedmont Lithium	Ewoyaa <sup>36</sup>	50%	PFS	255,000		127,500	AIM Announcement - Robust Ewoyaa Pre-Feasibility Study, September 22, 2022
Piedmont Lithium	Tennessee Lithium	100%	DFS		30,000	30,000	PLL Press Release - Piedmont Lithium Completes DFS of Tennessee Lithium Project, April 20, 2023
Piedmont Lithium	Carolina Lithium	100%	DFS	242,000	30,000	30,000	PLL Press Release - Piedmont Completes BFS of the Carolina Lithium Project, December 14, 2021
Sayona Mining	Sayona Quebec <sup>35</sup>	75%	DFS	190,000		142,500	ASX Announcement - DFS Confirms NAL value with A\$2.2B NPV, April 14, 2023
Core Lithium	Finniss	100%	DFS	173,000		173,000	ASX Announcement - Definitive Feasibility Study Investor Presentation, July 26, 2021
Liontown Resources	Kathleen Valley	100%	DFS	500,000		500,000	ASX Announcement - Kathleen Valley DFS Presentation, November 11, 2021
Lithium Americas	Cauchari-Olaroz	49%	DFS		40,000	17,920	Lithium Americas Website - Cauchari-Olaroz Overview
Lithium Americas	Thacker Pass (Phase 1)	100%	DFS		40,000	40,000	Lithium Americas Website - Thacker Pass Project Summary
Lithium Americas	Thacker Pass (Phase 2)	100%	DFS		40,000	40,000	Lithium Americas Website - Thacker Pass Project Summary
Sigma Lithium	Grota do Cirilo (Phase 1)	100%	DFS	270,000		270,000	Press Release - Sigma Lithium Achieves Outstanding Project Expansion, December 4, 2022
Sigma Lithium	Grota do Cirilo (Phase 2 & 3)	100%	PFS	496,000		496,000	Press Release - Sigma Lithium Achieves Outstanding Project Expansion, December 4, 2022
Livent	Carbonate for Sale <sup>37</sup>	100%	Operational / Expansion		30,000	30,000	Livent Website - Corporate Presentation, February 2023
Livent	Carbonate Conversion <sup>38</sup>	100%	Operational / Expansion		45,000	45,000	Livent Website - Corporate Presentation, February 2023
Livent	Nemaska <sup>39</sup>	50%	DFS	205,000	34,000	102,500 / 17,000	Livent Website - Corporate Presentation, February 2023

34. / 35. / 36. / 37. / 38. / 39. See <u>End Notes</u> for corresponding detailed disclosures



# LITHIUM MARKETS

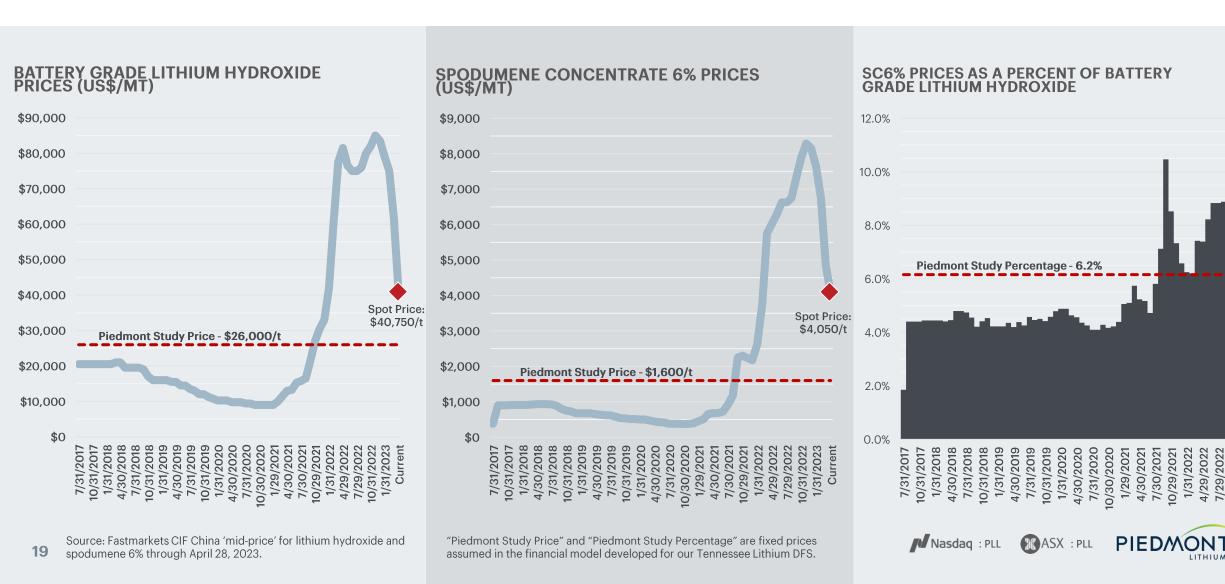
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**LiOH** 

# LITHIUM PRICES OFF ALL-TIME HIGHS



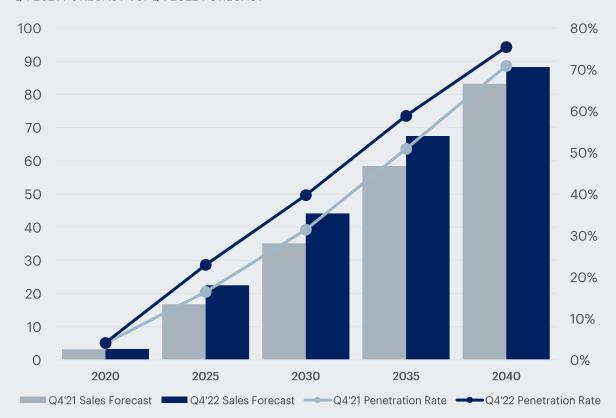
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# EV DEMAND PROJECTED TO GROW DRAMATICALLY

Demand has Exceeded Expectations; Supply has Struggled to Keep Up

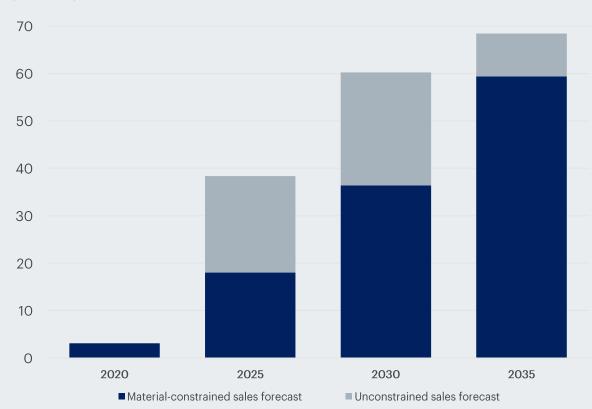
# ELECTRIC VEHICLE SALES AND PENETRATION RATE FORECASTS

Q4 2021 FORECAST VS. Q4 2022 FORECAST



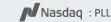
# MATERIAL-CONSTRAINED VS. UNCONSTRAINED ELECTRIC VEHICLE SALES FORECAST

(MM UNITS)



Source: Benchmark Minerals Intelligence Lithium Forecast

Source: Battery Material Review, Westbeck Capital estimates









# PIEDMONT LITHIUM

Nasdaq :PLL

■ ASX :PLL

ABN 50 002 664 495

**LiOH** 

# **LEADERSHIP**

Management Team with the Right Technical, Financial, and Project Execution Experience



KEITH PHILLIPS
Chief Executive Officer

**COWEN** 

J.P.Morgan





Patrick Brindle
Chief Operating Officer





**Bruce Czachor** 

Chief Legal Officer

Austin Devaney
Chief Commercial Officer

**▲** ALBEMARLE®



Kris McVey
Chief Administrative
Officer

TC . TRANSCONTINENTAL



Michael White Chief Financial Officer



Monique Parker SVP, Safety, Environment & Health

**▲** ALBEMARLE®



Nick Fouche SVP, Capital Projects



Erin Sanders
SVP, Corporate
Communications & IR



**Chief Geologist** 

**BHP** 





EY













CN CHERNOFF NEWMAN



Kemira







# **QUEBEC**

NAL Restart Achieved March 2023 as Scheduled Piedmont Offtake Customers LG Chem & Tesla

#### **HIGHLIGHTS**

- Piedmont Interest<sup>36</sup>
  - 13.6% SYA shares = \$161mm
  - 25% of Sayona Quebec
    - SYA USD market cap = \$1.2bb
  - Offtake 113,000tpy SC6 with ceiling price of \$900/t
- Among Canada's largest and bestlocated 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**

- PFS for completion of on-site carbonate refinery to be completed in H1 2023
- First shipments and revenue expected for Q3 2023





### **FACT SHEET**<sup>37</sup>

Location	Québec
Business	Spodumene Concentrate
Production	Year 1 -4: 226,000tpy SC LOM: 190,000 SC
PLL Offtake <sup>38</sup>	Greater of 50% of production or 113,000tpy
Offtake Price	Price Floor: \$500/t Price Ceiling: \$900/t
Shipments	Q3 2023
Capex	\$80mm
Opex	\$691/t SC6
After-tax NPV <sub>8</sub>	\$1.0bb

- 36. Piedmont owns ~1.2bb shares of Sayona Mining (ASX: SYA) and 25% of the Sayona Quebec joint venture. Market cap as of April 28, 2023.
- 37. See Sayona Mining ASX announcement "DFS Confirms NAL Value with A\$2.2B NPV" dated April 14, 2023, a copy of which can be found on Sayona Mining's website.
- 38. Refer to Piedmont's announcement dated June 28, 2022 for a summary of offtake agreement terms, a copy of which can be found on our Company website or in our SEC filings.

# **GHANA**

Atlantic Lithium May Provide Additional High-Quality SC6 to Support North American LiOH Operations



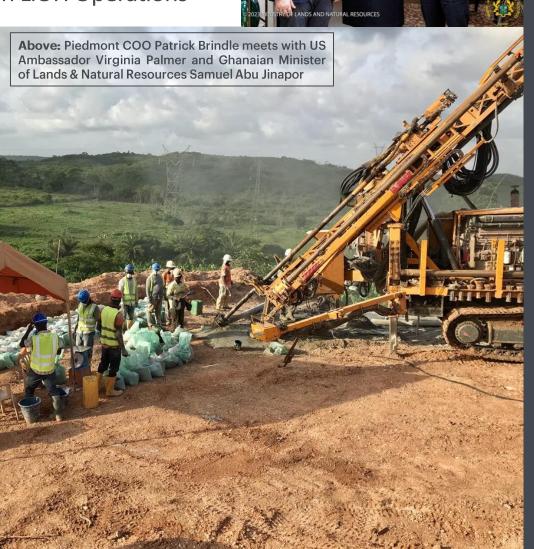
# ALL

### **HIGHLIGHTS**

- Piedmont Interest<sup>39</sup>
  - 9.4% ALL shares = \$24mm
  - Earning 50% of Ghanaian lithium portfolio
    - ALL market cap = \$254mm
  - 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**

- Definitive feasibility study
- Mining License



### **FACT SHEET**<sup>40</sup>

Location	Ghana
Business	Spodumene Concentrate
Production	255,000tpy SC6
PLL Offtake	50% of annual production
DFS Timing	2023
Capex	\$125mm
Орех	\$278/t SC6
After-tax NPV <sub>8</sub>	\$1.33bb
After-tax IRR	224%

- 39. 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 April 28, 2023.
- 40. Production and economics include the use of inferred resources which have a low level of geological confidence and as such we consider them to be at a scoping study level. See Atlantic Lithium AIM announcement "Pre-Feasibility Study Delivers Robust Project Economics" dated September 22, 2022, a copy of which can be found on Atlantic Lithium's website. Refer to cautionary statement on Page 3 of this presentation.

# **TENNESSEE LITHIUM**

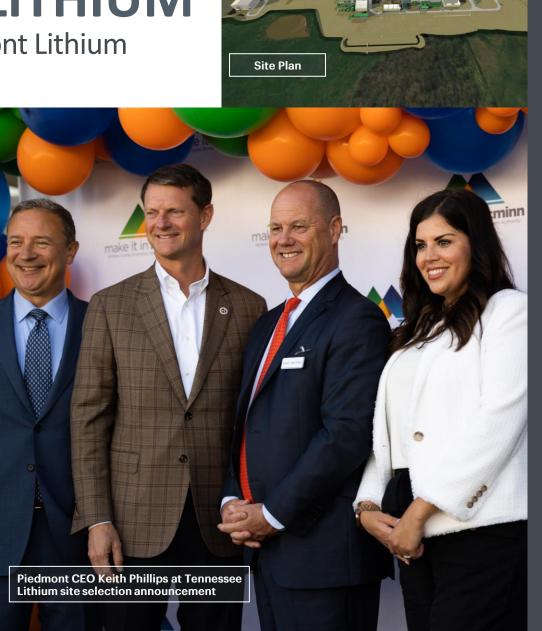
100% Owned by Piedmont Lithium

#### **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
- Selected for \$142mm DOE grant under Bipartisan Infrastructure Law

### **UPCOMING MILESTONES**

- Front end engineering design
- Lithium hydroxide offtake
- Potential project financing





### **FACT SHEET<sup>41</sup>**

Location	Etowah, McMinn County, TN
Product	Lithium Hydroxide
Production	30,000tpy LiOH
Feedstock	196,000tpy SC6
Сарех	\$809 million
Opex	\$13,673/t LiOH
EBITDA	\$376mm
After-tax NPV <sub>8</sub>	\$2.5 billion
After-tax IRR	32%
Payback	2.8 years

41. Refer to announcement "Piedmont Lithium Completes Definitive Feasibility Study of Tennessee Lithium Project" dated April 20, 2023, a copy of which can be found on our Company website or in our SEC filings.

# **CAROLINA LITHIUM**

100% Owned by Piedmont Lithium

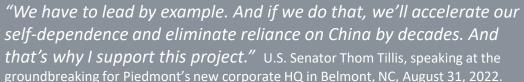
#### **HIGHLIGHTS**

- 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
- Potential project financing
  - Strategic partnering
  - ATVM loan







### FACT SHEET<sup>42</sup>

North Carolina, USA
Lithium Hydroxide
30,000tpy LiOH
242,000tpy SC6
\$988 million
\$4,377/t LiOH
\$459mm first 10 years
\$2.0 billion
27%
3.5 years

42. Refer to results of PLL Bankable Feasibility Study announcement dated December 14, 2021, a copy of which can be found on our Company website or in our SEC filings. Estimates prepared pursuant to SEC S-K 1300 and the JORC Code.

### **END NOTES**

Copies of the documents referred to in the end notes below can be found on the Company's website or in our SEC filings.

#### **U.S. Government EV Focus**

- 4. Grant funding subject to finalization of terms and conditions between Piedmont Lithium and the U.S. Department of Energy.
- 5. As a result of our grant award, our eligibility for an ATVM loan for Tennessee Lithium may be reduced or we may elect not to pursue an ATVM loan for the Tennessee Lithium Project.
- 6. There can be no certainty as to the actual interest rate for which Piedmont may be eligible under the ATVM program.

#### **Piedmont Project Portfolio**

- 8. Piedmont owns a 25% interest in Sayona Quebec and a 13.6% equity interest in Sayona Mining, resulting in an effective economic interest of ~35%.
- 9. Refer to Sayona Mining ASX announcement "DFS Confirms NAL Value with A\$2.2B NPV" dated April 14, 2023, a copy of which can be found on Sayona Mining's website.
- 10. Piedmont can earn a 50% interest in Atlantic Lithium's Ghanaian lithium portfolio and owns a 9.4% equity interest in Atlantic Lithium.
- 11. Production target and economics are based inclusion of inferred mineral resources which have a low level of geological confidence and as such we consider them to be at a scoping study level. Refer to cautionary note on page 3 of this presentation. See Atlantic Lithium announcement "Pre-Feasibility Study Delivers Robust Project Economics" dated September 22, 2022, a copy of which can be found on Atlantic Lithium's website.
- 12. Refer to Piedmont Lithium press release dated April 20, 2023 for Definitive Feasibility Study.
- 13. Refer to the result of Piedmont Lithium Bankable Feasibility Study announcement dated December 14, 2021, Estimates prepared pursuant to SEC S-K 1300 and the JORC Code.

#### **Piedmont Share of Annual Marketable Capacity**

- 14. Figures represent PLL's pro rata share of year-end nameplate capacity and not projected annual production.
- 15. Piedmont has an offtake agreement for the greater of 113,000 tpy or 50% of nameplate production. Project nameplate is 190,000tpy life of mine average spodumene concentrate based on feasibility study results announced by Sayona Mining. See Sayona Mining ASX announcement "DFS Confirms NAL Value with A\$2.2B NPV" dated April 14, 2023, a copy of which can be found on Sayona Mining's website.
- 16. Piedmont has an earn-in agreement for 50% offtake of SC6 production. Piedmont offtake is based on production results which includes the use of inferred resources which have a low level of geological confidence and as such we consider them to be at a scoping study level. See Atlantic Lithium announcement "Pre-Feasibility Study Delivers Robust Project Economics" dated September 22, 2022, which can be found on Atlantic Lithium's website. Refer to cautionary statement on Page 3 of this presentation.
- 17. Refer to updated Amended Technical Report Summary for the Carolina Lithium Project filed with our form 10-K/A dated April 25, 2023.
- 18. Based on estimate of 195,000tpy of SC6 to produce 30,000tpy LiOH.
- 19. See Piedmont Lithium announcement "Piedmont Lithium Completes Definitive Feasibility Study of Tennessee Lithium Project" dated April 20, 2023.
- 20. Sayona Mining is undertaking a prefeasibility study to complete the partially-constructed lithium carbonate plant at the North American Lithium facility. PFS expected in Q2 2023.

#### **Commercial Arrangements**

- 26. See Piedmont announcement "Piedmont Lithium and Sayona Mining Formalize Restart Plans for North American Lithium in Quebec" dated June 28, 2022.
- 27. Piedmont offtake is based on production results which includes the use of inferred resources which have a low level of geological confidence and as such we consider them to be at a scoping study level. See
  Atlantic Lithium announcement "Pre-Feasibility Study Delivers Robust Project Economics" dated September 22, 2022, which can be found on Atlantic Lithium's website. Refer to cautionary statement on Page 3.
- 28. See Piedmont announcement "Piedmont Lithium and LG Chem Sign Equity Investment and Binding Offtake Agreements" dated February 16, 2023.
- 29. See Piedmont announcement "Piedmont Lithium Amends Agreement with Tesla" dated January 3, 2023.







### **END NOTES**

Copies of the documents referred to in the end notes below can be found on the Company's website or in our SEC filings.

#### **Peer Project Notes**

- 34. The studies listed and associated production estimates are completed using varying classifications of Ore Reserves and Mineral Resources. Production estimates may include the use of inferred resources which have a low level of geological confidence and as such we would consider them to be at a scoping study level.
- 35. Sayona Quebec includes the projects owned by the joint venture between Sayona Mining and Piedmont in the Abitibi Hub, which encompasses North American Lithium, Authier and Tansim. North American Lithium and Authier are the subject of the DFS.
- 36. As part of its agreement announced by Atlantic Lithium on July 1, 2021, Piedmont has the right to earn a 50% interest in the Ewoyaa project, subject to terms and conditions. Production target is based inclusion of inferred mineral resources which have a low level of geological confidence and as such we consider them to be at a scoping study level. Refer to cautionary note on page 3 of this presentation.
- 37. Carbonate for Sale represents Livent's disclosure for estimated 2028 year-end capacity. This includes current capacity of 20k tpy and expansions amounting to 50k tpy before removing Carbonate to Feed Hydroxide. The existing production and future expansion are related to production from the Salar del Hombre Muerto.
- 38. Carbonate Conversion represents Livent's disclosure for estimated 2028 year-end lithium hydroxide capacity, which will utilize Livent's lithium carbonate as feedstock. The annual production capacity combines 25k tpy existing capacity and 20k tpy future expansions related to production from the Bessemer City, North Carolina and Zhejiang, China facilities.
- 39. Nemaska is the subject of a Definitive Feasibility Study which was released by Nemaska Lithium and filed with SEDAR on July 31, 2019. It is currently the subject of an ongoing Feasibility Study which is expected to be published in the H1 2023 and may show a change in production targets.









# LITHIUM - MADE IN THE USA

Helping Secure America's Energy Security
Macquarie Australia Conference
May 2023

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