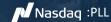




## CLEAN ENERGY IN THE USA

Corporate Presentation – May 2020

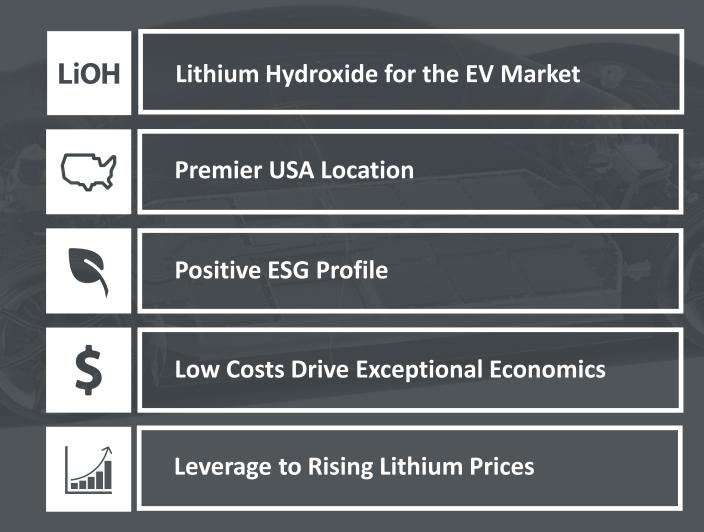




ABN 50 002 664 495

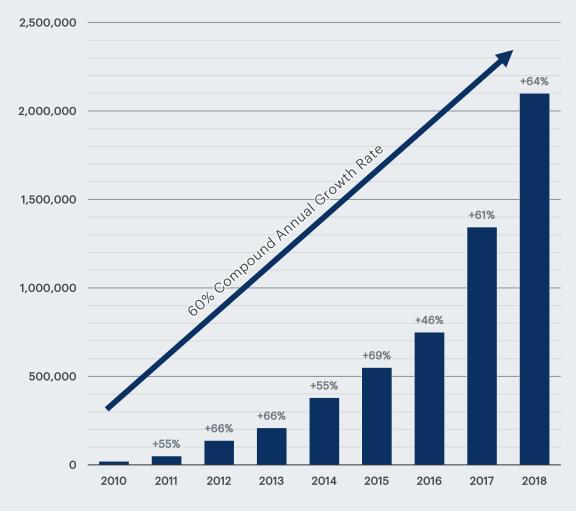


## WHY PIEDMONT LITHIUM?



## **ELECTRIC VEHICLE SALES DRIVEN BY ECONOMICS**

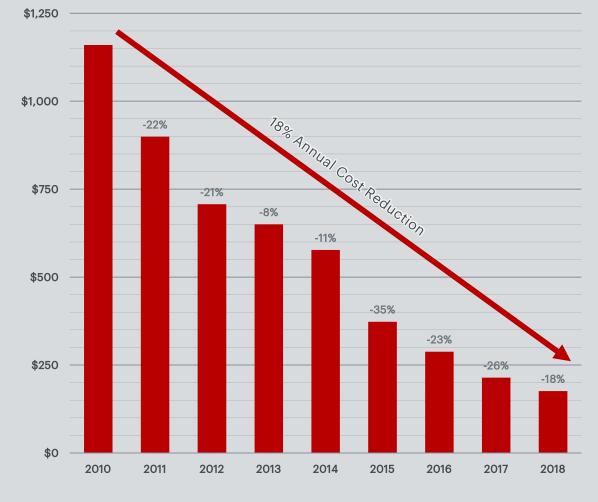
#### GLOBAL EV SALES UP 60% PER YEAR SINCE 2010



Source: EV Reports.com

### LI-ION BATTERY COSTS DOWN 85% SINCE 2010

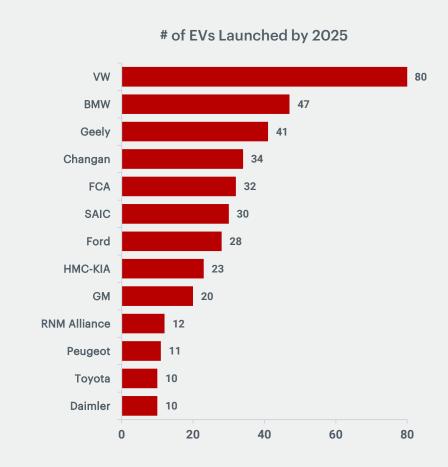
(PACK PRICE - REAL 2018 \$/KWH)



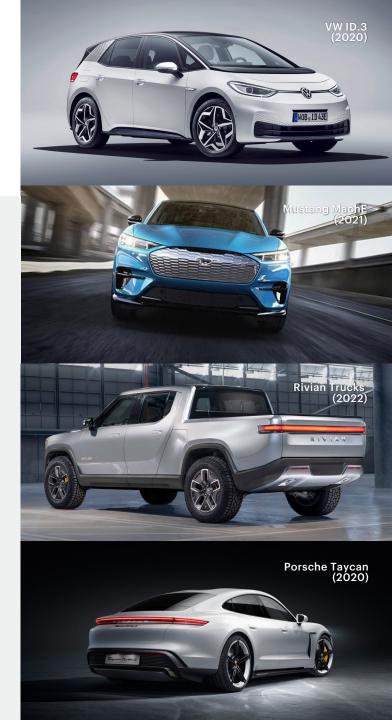
Source: Green Car Reports

## IT'S NOT JUST TESLA

- Major auto companies are all-in on electric vehicles
  - 400+ new EV models coming to market by 2025
- EU CO<sub>2</sub> emission requirements spurring strong EV development
- Mass market vehicles coming for the first time
  - Ford to produce electric F-150 "before 2022"
  - VW ID.3 launching in 2020
  - Renault producing \$9,000 EV for Indian market

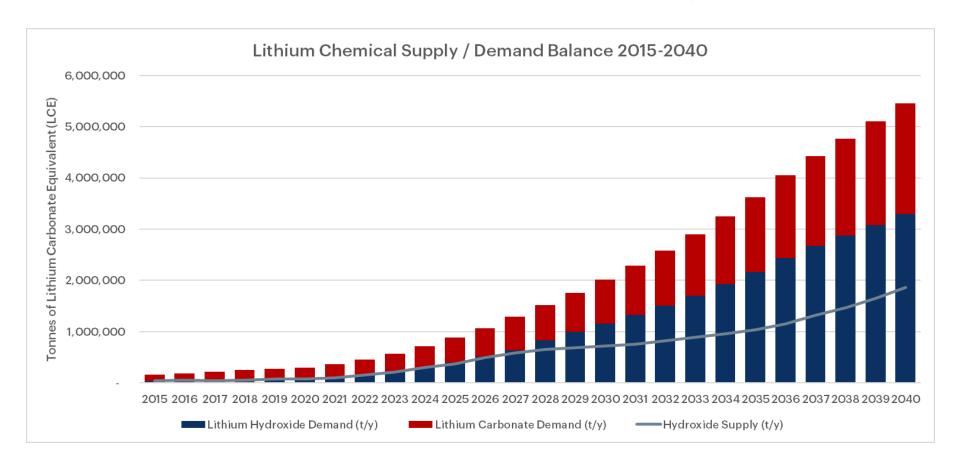






# HYDROXIDE TAKING SHARE IN FAST-GROWING LITHIUM MARKET

LiOH Demand Growing 31% Per Year Thru 2030





LiOH required in the high-nickel batteries used in longer-range vehicles

Hydroxide shortages expected by 2023

80% of the world's hydroxide is currently produced in China

North Carolina is the leading ex-China LiOH producer

## SPODUMENE THE PREFERRED FEEDSTOCK

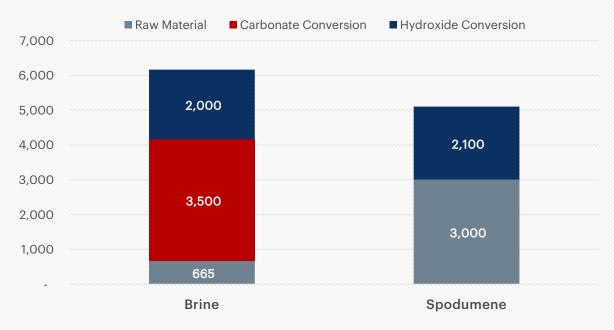
# MAJOR AUTO COMPANIES PREFER SPODUMENE-SOURCED HYDROXIDE

"Lithium extracted from mining ... is commercially more attractive ... more stable to extract, easier to scale and generally more sustainable." VW- April 2019

"BMW signs contract with Ganfeng for sustainable lithium from mines in Australia."

BMW - November 2019

## SPODUMENE IS THE LOW-COST SOURCE FOR LITHIUM HYDROXIDE



Source: McKinsey & Co., costs represent indicative 2025 costs for typical South American brine operations and typical Western Australian spodumene operations.



# PIEDMONT IS LOCATED IN THE USA'S AUTO ALLEY

## US EV MARKET ACCELERATING AS SUPPLY CHAIN LOCALIZATION TAKES HOLD

General Motors says it will be all-electric 'sooner than people would think

Bradley Berman - May. 1st 2020 1:23 pm ET

SK Innovation to spend \$1.5B on Georgia plants, as 'center' of world EV battery industry

Tesla Cybertruck will spawn the first 'Terafactory' in the

Trump administration pushing to rip global supply chains from China: officials

General Motors is investigating ways to source important lithium-ion battery minerals (such as lithium and nickel) from North America for its new range of electric vehicles, and for its battery cells to be made in Ohio.

Laderytising with us.

American Government takes Disruptive Steps through the ORE Act to end Chinese Control of Rare Earths, Cobalt, Graphite, Lithium and Manganese

General Motors and LG Chem Team Up to Advance Toward an All-Electric Future, Add Jobs in Ohio

Springfield, Min. ment, expansion baran

graved case; in complete of cost, \$53. Price, \$29.

US Army plans for an EV future

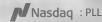
usiness man doing any busi-"Bessemer City...brings a lot more flexibility to our cost structure. It removes a lot of the requirement that we have today to export out of China and incur that VAT cost, etc. It's actually a lower cost production, actually, than in China." Livent CEO Paul Graves told the FT.

> Why China is losing the coronavirus narrative

as h

man

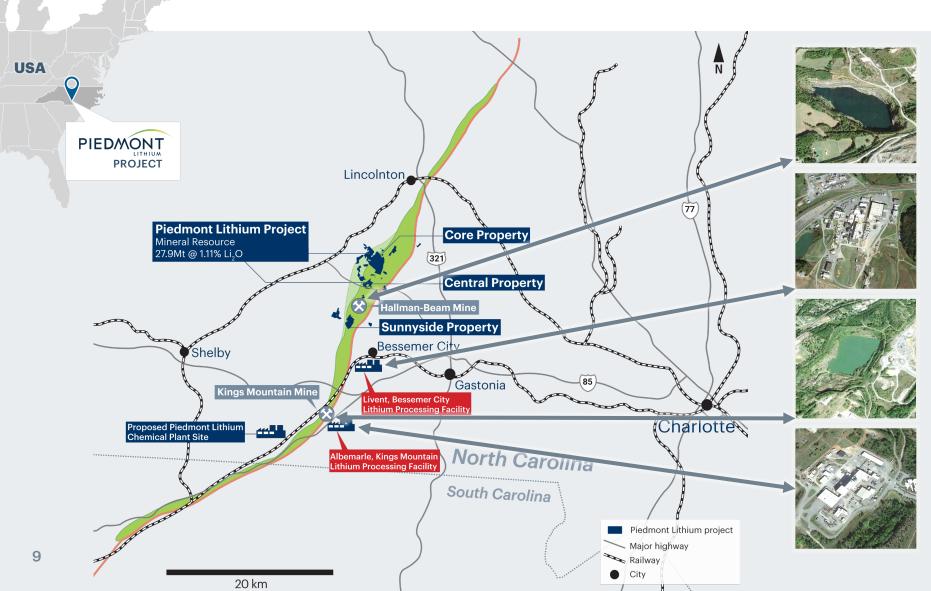
Ford's electric Mustang is just the beginning for high-performance battery vehicles







# PIEDMONT LITHIUM IS IDEALLY LOCATED IN NORTH CAROLINA



PLL

#1
STATE FOR
BUSINESS

**O%**STATE MINING
ROYALTIES

23%
CORPORATE
TAX RATE

~100%
PAST LITHIUM
PRODUCTION

# NORTH CAROLINA LOCATION PROVIDES COMPETITIVE ADVANTAGE

### Low-cost operating environment

- Unparalleled infrastructure
- Low-cost power and gas

### Deep lithium processing talent pool

- North Carolina has 50+ years of lithium processing experience
- Southeast USA among world's premier chemical processing regions

#### Low tax rates

- US has lowest corporate tax rate among major Western countries
- US does not have a Value-Added Tax (China 16%)

### Proximity to major automotive markets

- USA + EU represent over 30% of world automotive sales
- Western battery supply chains are growing









## TWO DEVELOPMENT SCENARIOS...



**MERCHANT PROJECT** 

Spodumene Supply from the Market

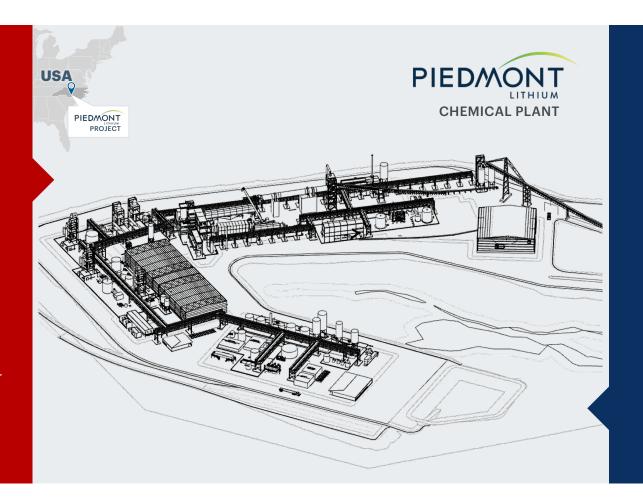
22,700 t/y Lithium Hydroxide

25 Year Chemical Plant Life

World's Lowest Cost Merchant Producer

US\$714M (A\$1.1B) NPV - 26% IRR

US\$149M (A\$229M) EBITDA





**INTEGRATED PROJECT** 

Spodumene from Piedmont Mine / Concentrator

22,700 t/y Lithium Hydroxide

25 Year Mine & Chemical Plant Life

World's Lowest Cost Producer

US\$1.1B (A\$1.6B) NPV - 26% IRR

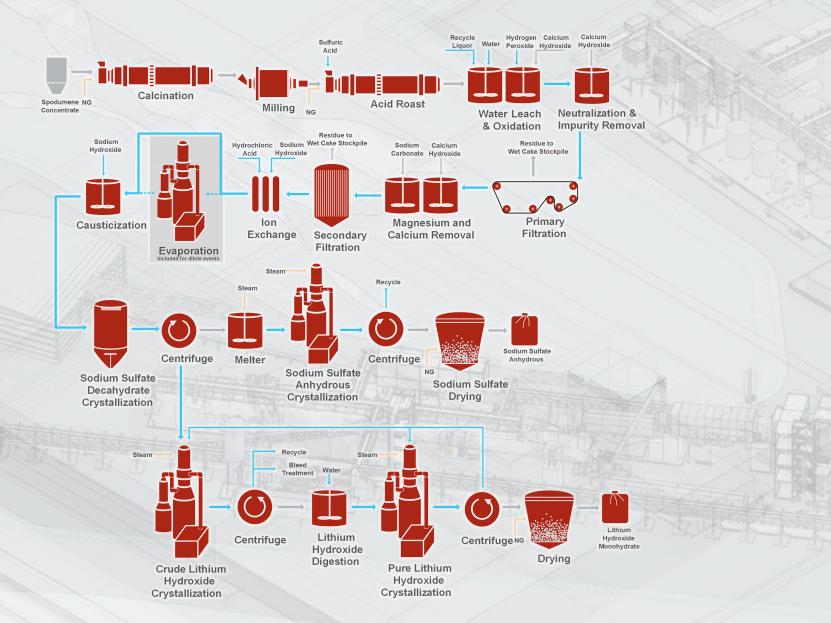
US\$218M (A\$335M) EBITDA







## ...USING THE SAME FLOW SHEET...



# LOW-RISK CONVENTIONAL CONVERSION TECHNOLOGY

**22,720 TPY**BG LIOH PRODUCTION

US\$2,371/t CONVERSION COST

**24 MONTH**RAMP-UP PERIOD

**MINOR SOURCE** 

PERMITTING PROCESS

## ...DELIVERING EXCEPTIONAL ECONOMICS

Outcomes	Unit	Merchant Project	Integrated Project
Project Life	years	25	25
Steady State LiOH Production	t/y	22,720	22,720
Steady State Spodumene Production	t/y	N/A	160,000
LiOH Cash Costs	US\$/t	\$6,689	\$3,712
Long-Term Spodumene Costs	US\$/t	\$651	\$201
Mine/Concentrator Initial Capital	US\$M	N/A	\$168
Chemical Plant Initial Capital	US\$M	\$377	\$377
Annual average EBITDA (steady-state)	US\$M/y	\$149	\$218
After Tax NPV @ 8% discount rate	US\$M	\$714	\$1,071
After Tax IRR	%	26%	26%
Payback from start of operations	У	3.34	3.23
Assumed long term LiOH price (real)	US\$/t	\$12,910	\$12,910

### STRONG ECONOMICS WITH CONSERVATIVE PRICE DECK

22,720 t/y
BATTERY QUALITY LIOH
PRODUCTION

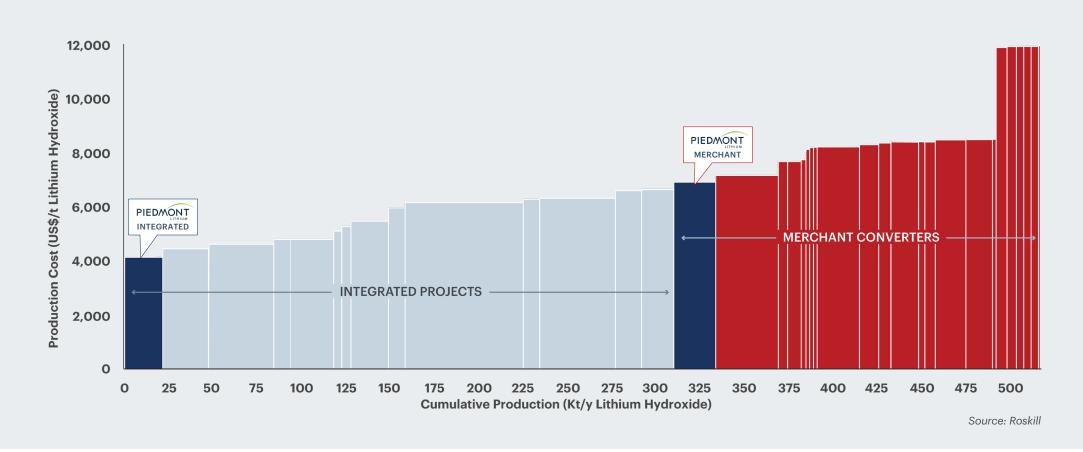
\$3,712/t LiOH
LOWEST CASH COST
INTEGRATED PRODUCER

**LOWEST COST** 

**MERCHANT PRODUCER** 

\$12,910/t
CONSERVATIVE LONG-TERM
PRICE ASSUMPTION

## LOCATION DRIVES LOW OPERATING COSTS

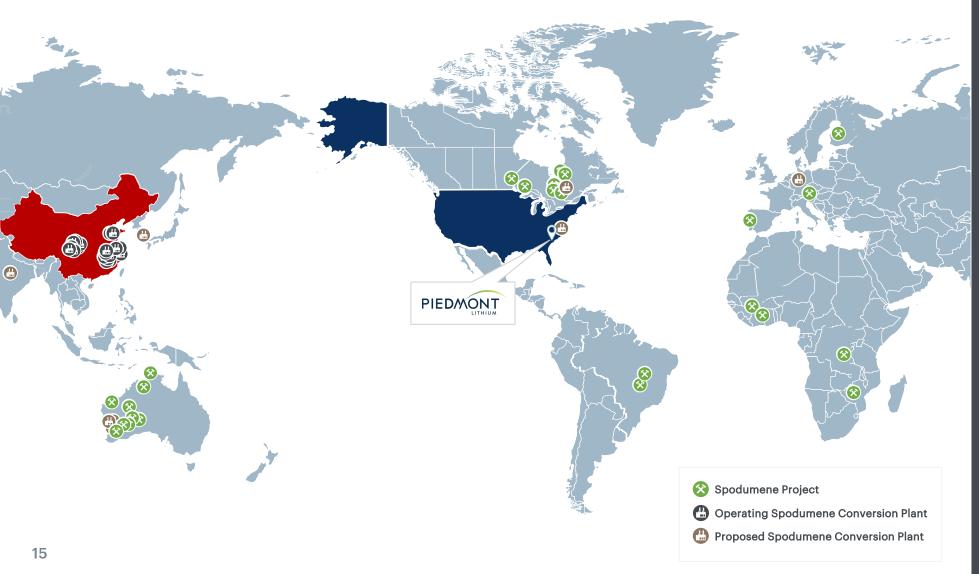








# MERCHANT HYDROXIDE OPPORTUNITY





~100% OF WORLD
SPODUMENE
PRODUCTION IS
CURRENTLY CONVERTED
IN CHINA

CHINA PRODUCES 80% OF WORLD'S LITHIUM HYDROXIDE

AS SUPPLY CHAINS LOCALIZE US AND EUROPEAN OEMS WILL SEEK ALTERNATIVE SOURCES

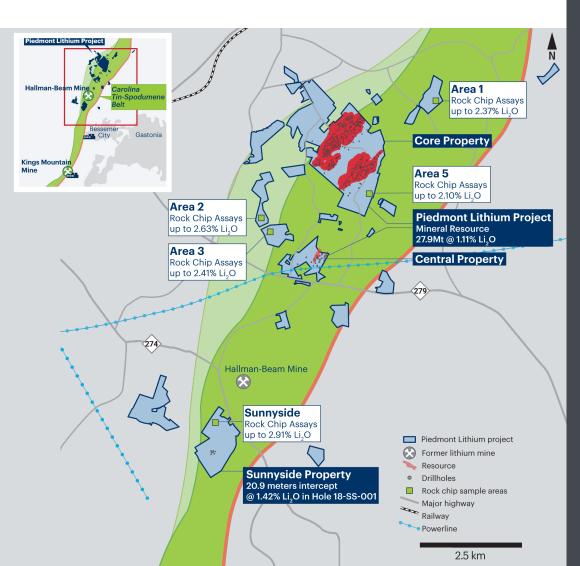
NORTH CAROLINA IS AN IDEAL LOCATION FOR SUCH CONVERSION



## INTEGRATED BUSINESS BENEFITS FROM HIGH-GRADE RESOURCE WITH VAST UPSIDE

## 27.9 Mt @ 1.11% Li<sub>2</sub>O

- 764,000 tonnes of contained LCE
- 100% of the lithium is attributable to spodumene mineralization
- Shallow open pits 74% of resource within 100m of surface and 97% within 150m
- Open along strike and at depth





## **OPEN ALONG**STRIKE AND AT DEPTH

**SHALLOW**OPEN PIT QUARRYING

### PURE SPODUMENE MINERALOGY

**ABUNDANT**CLEAN PROCESS WATER

### 85% RECOVERIES

BASED ON TESTWORK & 50 YEARS OF TSB PRECEDENT QUARTZ







**FELDSPAR** 







MICA







## **BY-PRODUCTS SERVE IMPORTANT MARKETS WHILE PROVIDING IMPORTANT CREDITS TO OPERATING COSTS**





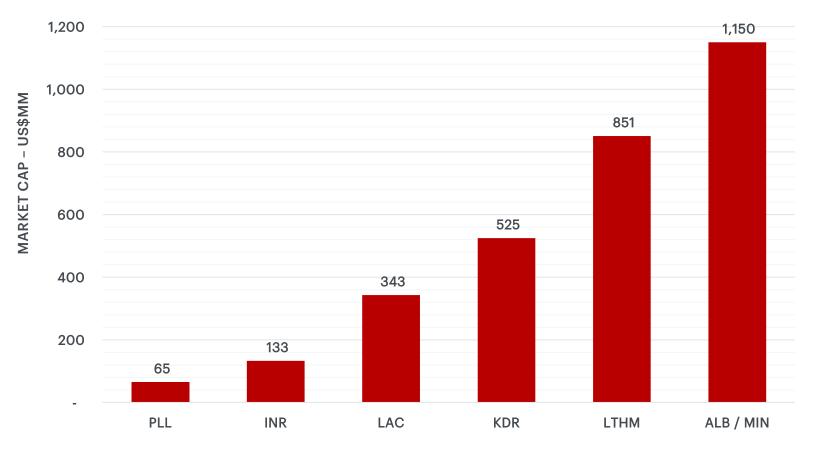


## **POSITIVE ESG PROFILE**

	Clean Energy Product Portfolio	<ul> <li>Lithium fuels EVs, reducing emissions 67% vs. ICEs</li> <li>Quartz by-product targeted at growing solar glass market</li> </ul>
	OEMs Prefer Hard Rock for Sustainability	<ul> <li>Preference for spodumene vs. brine from a sustainability perspective</li> <li>Brine projects under pressure due to impact on water supply</li> </ul>
$\bigcirc$	Short Transport Distances	<ul> <li>20-mile SC6 transport for integrated business vs. ~5,000 from Australia to China</li> <li>Potential 98% reduction in 'mine-to-EV' supply chain</li> </ul>
	Green Mining	<ul> <li>100% of electricity will come from low-carbon sources</li> <li>No toxic chemicals or tailings impoundment; electric mining fleet being evaluated</li> </ul>
18	Social	■ First-world labor and environmental practices ■ USA safety standards ■ Nasdaq : PLL

# CATALYSTS TO DRIVE SHAREHOLDER VALUE

- Hydroxide testwork
- ☐ Permit Kings Mountain site
- ☐ Build project execution team
- ☐ Secure LiOH offtake agreements
- Explore strategic partnerships
- ☐ Definitive feasibility studies
- Financing and construction









PIEDMONT LITHIUM LIMITED	<b>M</b> ASX	Nasdaq
Shares / ADRs (1 ADR = 100 Shares)	826.3 mm	8.26 mm
Price (@ 5/22/20)	A\$0.115	US\$7.85
Market Cap (@ 5/22/20)	A\$95 mm	US\$65 mm
Cash (@ 3/31/20)	A\$14.5 mm	US\$9.0 mm

#### **KEY SHAREHOLDERS**

Australian Super	13%
Fidelity	9%
Officers and Directors	11%

#### **BOARD OF DIRECTORS**

Ian Middlemas	Australia	Chairman
Keith D. Phillips	USA	CEO
Anastasios Arima	USA	Director
Jeff Armstrong	USA	Director
Jorge Beristain	USA	Director
Levi Mochkin	Australia	Director

## CORPORATE **SNAPSHOT**

#### **RESEARCH COVERAGE**



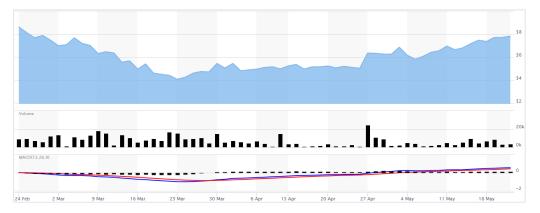








#### SHARE PRICE PERFORMANCE - LAST 3 MONTHS









## HIGHLY-EXPERIENCED LEADERSHIP TEAM

#### TECHNICAL CONSULTANTS



Hatch

hatch.com



**Primero** 

primero.com.au



**HDR** 

hdrinc.com



**Marshall Miller** 

mma1.com



SGS

sgs.com



CSA

csaglobal.com

### LEADERSHIP TEAM



Keith Phillips, Managing Director & CEO 30+ Years Wall Street experience with JPMorgan, Merrill Lynch and Goldman Sachs



Taso Arima, Founder and Director 12+ years natural resource visionary executive; founder of multiple natural resource companies



Patrick Brindle, VP – Project Management 20+ years US and global engineering, procurement and construction experience



Lamont Leatherman, VP – Chief Geologist 25+ years as an exploration geologist, senior positions in BHP & Noranda in the Carolinas



**David Buckley,** VP – Process Engineering 25+ years lithium extraction and conversion expert, ex-FMC and Albemarle



Tim McKenna, Government & Investor Relations
30+ years government & investor relations, including with Rockwood Lithium and Lithium X

### **DISCLAIMERS**

#### **Cautionary Statements and Important Information**

This presentation does not constitute or form part of any offer to sell, or solicitation of any offer to buy, any securities in the United States or any other country. This presentation may not form the basis of any contract or commitment whatsoever with any person. Distribution of this presentation may be restricted by applicable law. This presentation has been prepared by Piedmont Lithium Limited ("Piedmont") as a summary only, and does not contain all information about Piedmont's assets and liabilities, financial position and performance, profits and losses, prospects, and the rights and liabilities attaching to Piedmont's securities. Any investment in Piedmont should be considered speculative and there is no guarantee that they will make a return on capital invested, that dividends would be paid, or that there will be an increase in the value of the investment in the future. Piedmont does not purport to give financial or investment advice. No account has been taken of the objectives, financial situation or needs of any recipient of this presentation. Recipients of this presentation should carefully consider whether the securities issued by Piedmont are an appropriate investment for them in light of their personal circumstances, including their financial and taxation position.

#### **Forward Looking Statements**

This presentation contains forward-looking statements within the meaning of securities legislation in Australia and the United States, including statements regarding exploration and development activities; plans for Piedmont's mineral projects; projections of market demand and lithium prices; statements about the timing and amount of resource declarations; and statements about the timing and ability to complete scoping studies and feasibility studies.

Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual events, results, performance or achievements to be materially different from events, results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, the risk that we will be unable to commercially extract mineral deposits, that our properties may not contain expected reserves, risks and hazards inherent in the mining business (including risks inherent in developing mining projects, environmental hazards, industrial accidents, weather or geologically related conditions), uncertainty about our ability to obtain required capital to execute our business plan, our ability to hire and retain required personnel, changes in the market prices of lithium, changes in technology or the development of substitute products, the uncertainties inherent in exploratory, developmental and production activities, including risks relating to permitting and regulatory delays, uncertainties inherent in the estimation of lithium resources, risks related to competition, as well as other uncertainties and risk factors set out in filings made from time to time with the Australian Stock Exchange and the U.S. Securities and Exchange Commission, including our most recent Form 20-F. Actual events, results, performance and achievements could vary significantly from the estimates presented in this presentation. Readers are cautioned not to put undue reliance on forward-looking statements. We disclaim any intent or obligation to update publicly such forward-looking statements, whether as a result of new information, future events or otherwise. Additionally, we undertake 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.

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

The Project's Core Property Mineral Resource of 25.1Mt @ 1.09% Li<sub>2</sub>O comprises Indicated Mineral Resources of 12.5Mt @ 1.13% Li<sub>2</sub>O and Inferred Mineral Resources of 12.6Mt @ 1.04% Li<sub>2</sub>O. The Central Property Mineral Resource of 2.80Mt @ 1.34% Li<sub>2</sub>O comprises Indicated Mineral Resources of 1.41Mt @ 1.38% Li<sub>2</sub>O and 1.39Mt @ 1.29% Li<sub>2</sub>O.

The information contained in this presentation has been prepared in accordance with the requirements of the securities laws in effect in Australia, which differ from the requirements of U.S. securities laws. The terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are Australian terms defined in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). However, these terms are not defined in Industry Guide 7 ("SEC Industry Guide 7") under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act"), and are normally not permitted to be used in reports and filings with the U.S. Securities and Exchange Commission ("SEC"). Accordingly, information contained herein that describes Piedmont's mineral deposits may not be 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 closely the disclosure in Piedmont's Form 20-F, a copy of which may be obtained from Piedmont or from the EDGAR system on the SEC's website at <a href="https://www.sec.gov">www.sec.gov</a>.

#### **Competent Persons Statements**

The information in this presentation that relates to Exploration Results, Mineral Resources, Metallurgical Testwork Results, Concentrator Process Design, Concentrator Capital Costs, Concentrator Operating Costs, Mining Engineering and Mining Schedule was extracted from our ASX announcement dated May 26, 2020 which is available to view on the Company's website at <a href="https://www.piedmontlithium.com">www.piedmontlithium.com</a>.

Piedmont confirms that: a) it is not aware of any new information or data that materially affects the information included in the original ASX 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 ASX 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 ASX announcement.











## PIEDMONT LITHIUM LIMITED

Clean Energy in the USA – May 2020

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