



# **GASTON COUNTY AND PIEDMONT LITHIUM. BUILDING A POWERFUL PARTNERSHIP.**

Creating Local Jobs and a Positive Economic Impact for the  
Entire Community and Country for Years to Come.

 Nasdaq:PLL

 ASX:PLL

ARBN 647 286 360

July 20, 2021

**LiOH**

# WHY WE ARE HERE TODAY

- We spent the past year improving the project for Gaston County
- Updated Scoping Study published June 9, 2021
  - Moving all operations to one integrated site in Gaston County
    - Shifts 200+ jobs from Kings Mountain to the Dallas-Cherryville area
  - Process improvements to make our operations the world's most sustainable lithium project
    - Innovative Metso-Outotec process – sulfate and acid-free
    - Investing ~\$63 million to install electric conveyors to reduce noise and dust
- Total capital investment of ~\$840 million
- ~500 permanent jobs at average salary and benefits over \$90,000
  - Working with Gaston County Schools/Gaston College on skills and career development
- We hope to attract many other businesses and make Gaston County the USA leader in the electric vehicle supply chain

# COMMUNITY ENGAGEMENT

## **Introduction – July 20, 2021**

- This is the beginning of our formal engagement with Gaston County
- Introduction of our Project

## **Consultation over next several months**

- Open and Transparent
- Town halls, small group meetings and one-on-one sessions
- Website portal – Q&A
- We are happy to answer everyone's questions
- We are proud of our Project and believe the more people learn about it the more they will like it

## **Upcoming Milestones**

- State Mining Permit – application to be submitted in August 2021
- Definitive Feasibility Study – September 2021
- Economic Impact Study – October 2021



# PIEDMONT LITHIUM – OUR PRESENCE IN GASTON COUNTY

## Proud to Call Gaston County "Home"

- An American Company – HQ in Belmont, NC
  - Founded in 2016 to bring lithium back to Gaston County
  - 24 employees, all Americans, local expertise
  - Principally engineers and geologists, with extensive experience developing projects in the US and overseas
- Invested ~\$58 million over the past 5 years
- Active in the community
  - Chambers of Commerce, Gaston County Schools, Youth Sports, Schiele Museum, Price's Arena, Carolina Thread Trail...
- Publicly listed on NASDAQ
  - Ongoing reporting obligations
- Plan to develop America's largest lithium business with core assets in North Carolina, Canada and Ghana



# OUR PROJECTS



## CAROLINA LITHIUM (100% OWNERSHIP)

**PLL**

Project	Carolina Lithium
Location	Gaston County, North Carolina
Phase 1 Project Stage	Scoping (DFS – September 2021)
Mineral Resources	39.2Mt @ 1.09% Li <sub>2</sub> O
Production	30,000tpy LiOH; 248,000 tpy SC6

## SAYONA QUEBEC (~39.6% ECONOMIC INTEREST<sup>1</sup>)

**SYA**

Project	Authier + La Corne
Location	Abitibi Region, Quebec
Project Stage	DFS to be updated in 2022
Mineral Resources	68.0Mt @ 1.14% Li <sub>2</sub> O
Production	TBD

## IRON RIDGE GHANA (EARNING 50% PROJECT INTEREST<sup>2</sup>)

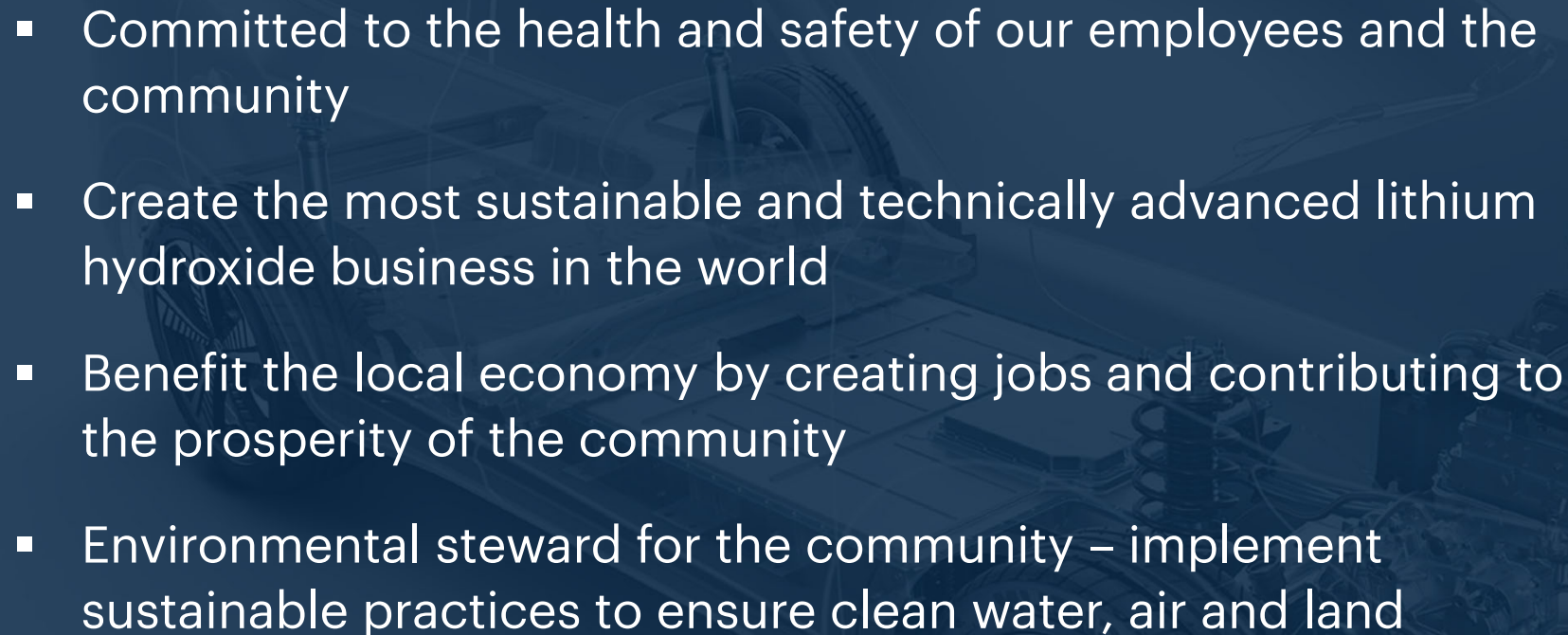
**IRR**

Project	Ewoyaa
Location	Cape Coast, Ghana
Project Stage	Scoping + Exploration
Mineral Resources	14.5Mt @ 1.31% Li <sub>2</sub> O
Production	295,000tpy SC6 (50% to PLL)

Note 1: Piedmont owns a 25.0% interest in Sayona Quebec and a 19.5% stake in Sayona Mining, resulting in an effective economic interest of 39.6%. Information is based on SYA Public Filings

Note 2: Piedmont is earning a 50% interest in IronRidge's Ghanaian lithium portfolio and owns a 9.47% stake in the parent company. Information is based on IRR Public Filings

# PIEDMONT'S GOALS

- 
- Committed to the health and safety of our employees and the community
  - Create the most sustainable and technically advanced lithium hydroxide business in the world
  - Benefit the local economy by creating jobs and contributing to the prosperity of the community
  - Environmental steward for the community – implement sustainable practices to ensure clean water, air and land





# AUTOMAKERS ARE ALL-IN ON ELECTRIC VEHICLES.

Ford plans to invest \$29B toward electric vehicles

GM Aims to Go All Electric by 2035

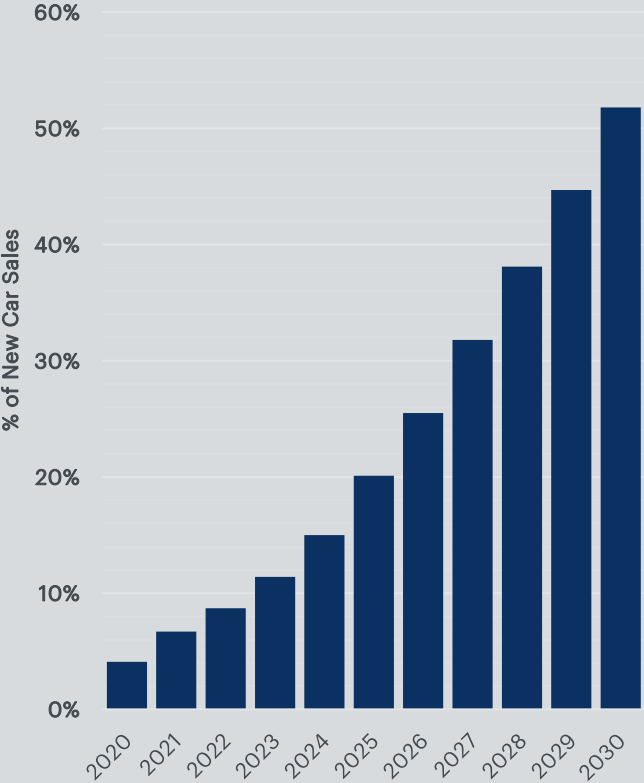
Ram Electric Pickup Is Coming Soon

Daimler Unveils Electric Freightliner



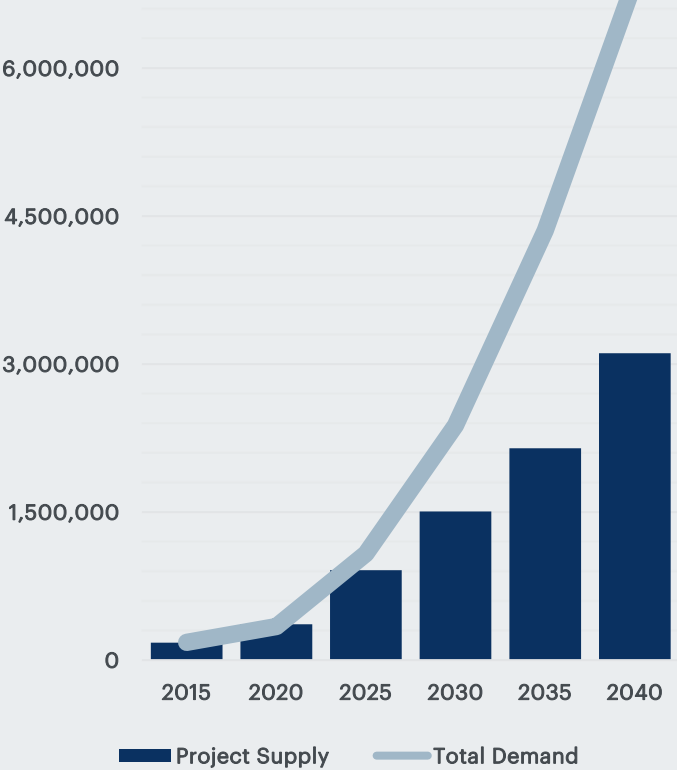
# LITHIUM INDUSTRY – SIGNIFICANT SUPPLY GAP / CHINA CONTROL

ELECTRIC VEHICLE PENETRATION



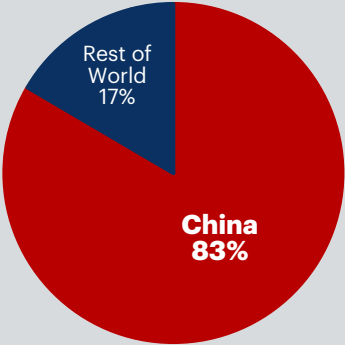
Source: Bloomberg New Energy Finance  
<https://about.bnef.com/blog/behind-scenes-take-lithium-ion-battery-prices>

LITHIUM SUPPLY SHORTFALLS EXPECTED (MT)

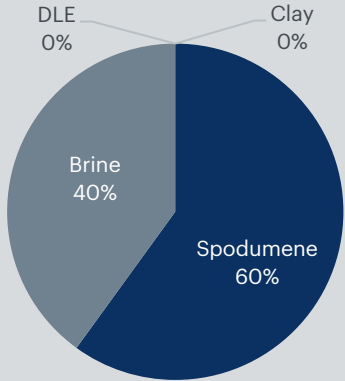


Source: Benchmark Mineral Intelligence – Lithium Forecast, Q1 2021

LITHIUM HYDROXIDE SUPPLY



LITHIUM HYDROXIDE SOURCES





# BI-PARTISAN SUPPORT FOR CRITICAL MINERAL PRODUCTION IN THE UNITED STATES



"The bottom line is simple: The American people should never face shortages in the goods and services they rely on...(we plan) to expand sustainable, responsible critical minerals production and processing in the United States."

– President Joe Biden

"The United States must broadly enhance its mining and processing capacity ... (to) guard against the possibility of supply chain disruptions and future attempts by our adversaries or strategic competitors to harm our economy and military readiness...We will put our miners back to work."

- President Donald J. Trump



# GASTON COUNTY AT THE CENTER OF THE ELECTRIC VEHICLE SUPPLY CHAIN FOR AMERICA

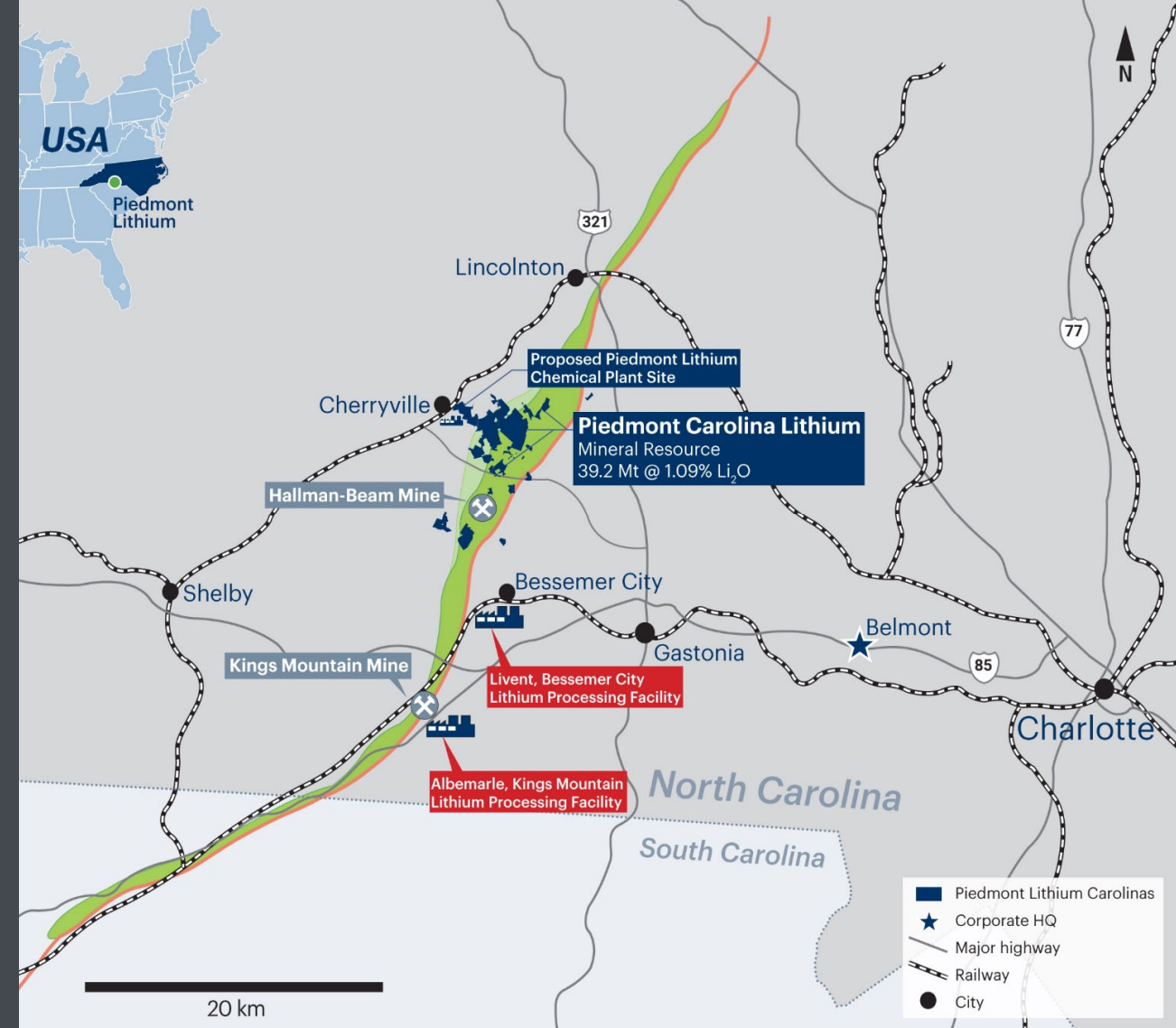
Magnet to attract other EV supply chain companies expanding the tax base, creating more jobs, positively impacting the entire community



- No other proven U.S. source of lithium hydroxide from spodumene
- Lithium demand will far exceed supply and Gaston County is ideally located to supply the U.S. Automakers
- Piedmont can be a magnet for lithium-ion battery plants
- Gaston County potentially insulated from the inevitable changes in the traditional automotive industry

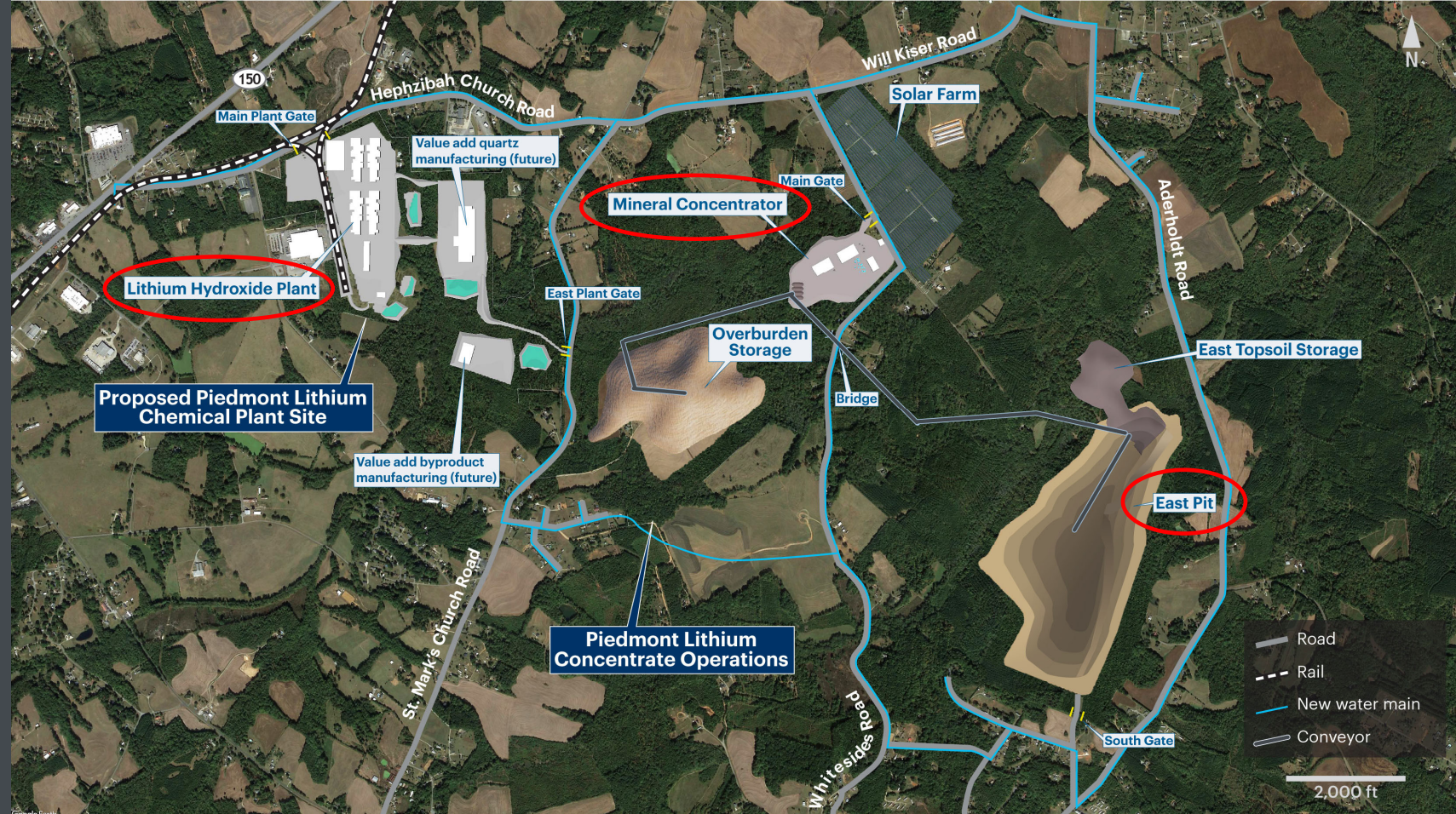
# GASTON COUNTY – THE CRADLE OF THE LITHIUM INDUSTRY

- Virtually all the world's lithium came from Gaston County from the 1950s to the 1990s
- The Carolina Tin Spodumene Belt is one of the world's largest, and the only American spodumene resource
- Piedmont Lithium's mission is to do it safely and more environmentally friendly thru advanced technology
  - We're following modern mining, environmental, water, and air regulations that are better and safer than older rules
  - Our technology is highly advanced, makes less waste, uses fewer chemicals, and takes less energy
- 11 active quarry sites greater than 100 acres within 30 miles of our proposed site that we live near, or drive by each day; and benefit from the products these minerals produce





# A SAFE, STATE-OF- THE-ART, INTEGRATED BUSINESS ON A SINGLE SITE



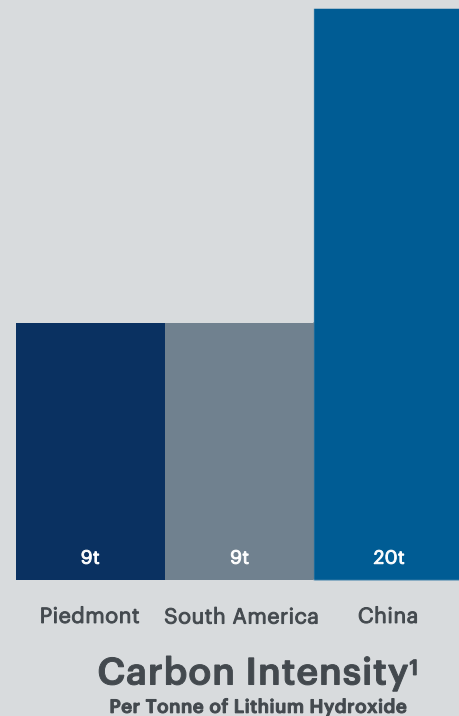
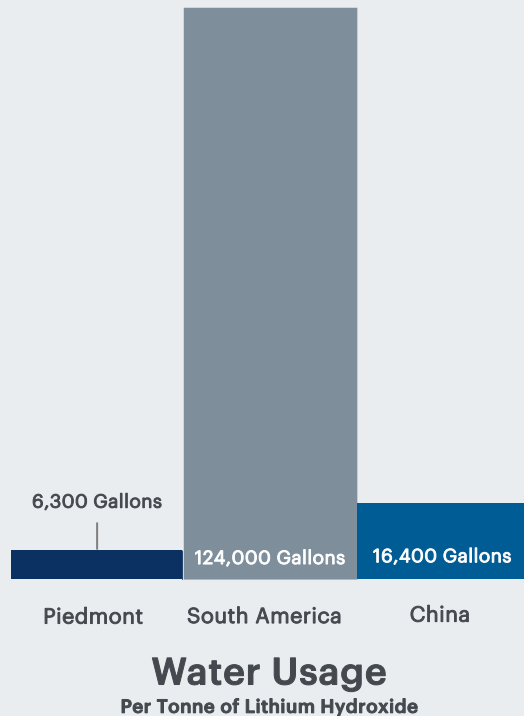
**2018**  
Produce Spodumene  
Only  
Ship to China  
for EV Market Growth

**2019**  
Produce Spodumene in  
Gaston County  
Produce LiOH in  
Cleveland County

**2020**  
COVID-19 Pandemic  
Re-evaluate Scope &  
Business Strategy

**2021**  
Integrated Spodumene  
and Lithium Hydroxide  
Site all in Gaston County

# THE WORLD'S MOST SUSTAINABLE LITHIUM PROJECT



## SUSTAINABILITY BENEFITS OF CAROLINA LITHIUM PROJECT

- Vastly diminished 'quarry-to-EV' supply chain distances
- Captive solar to power most operations
- In-pit crushing and electric conveying to reduce emissions and dust
- By-product recovery minimizes waste
- Metso-Outotec process reduces CO<sub>2</sub> emissions and is sulphate and acid-free
- Relatively low water usage and land footprint



# REGULATORY DUE DILIGENCE AND PERMITTING ACHIEVEMENTS

## The U.S. Has the World's Most Rigorous Permitting Processes

### Consulted with:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- Environmental Protection Agency
- NC Department of Environmental Quality
- NC Department of Transportation
- NC Wildlife Resources Commission
- NC State Historic Preservation Office

### Obtained:

- U.S. Army Corps of Engineers Section 404 of the Clean Water Act Individual Permit
- NC Division of Water Resources Section 401 of the Clean Water Act Individual Water Quality Certificate
- Title V Synthetic Minor Permit from NC Division of Air Quality

### Resulting in:

- Environmental Assessment and Finding of No Significant Impact per the National Environmental Policy Act
- Groundwater Modeling
- Toxicity Characterization with non-hazardous results
- Mitigation for streams/wetlands

### Anticipated:

- NC Mine Permit – application to be submitted in August 2021
- NC Air Quality Permit
- NC/Gaston County - Stormwater Permits
- NC/Gaston County - Erosion Control Permits
- Gaston County - Conditional District Rezoning



# HOW WILL WE PROTECT YOUR WATER?

- Expected to be the most water efficient lithium project in the world
- Rigorous state and federal permitting processes
  - Received 'FONSI' from US Army Corps of Engineers
    - 'Finding of No Significant Impact'
  - Received Water Quality Certification from NCDEQ
- Streams and surface water monitoring programs
- Zero wastewater discharge to creeks, streams and wetlands
- Independent review by Catawba Riverkeeper
- No tailings slurry, lagoon, dam
- Local well water
  - Continuous ground water monitoring
  - Working with Gaston County to bring county water supply to our area





# WHAT WE ARE DOING ABOUT TRAFFIC

- Utilizing electric conveyors vs. trucks to reduce truck traffic and emissions
  - Investing ~\$63 million to replace mine trucks with an electric conveyor system
  - Conveyors are fully-covered and quiet
  - Conveyors make it possible to connect our Concentrator and Chemical plant without using on-road trucks
- Fully-integrated Gaston County site
  - Eliminates 20-mile truck haul to Kings Mountain
- Working with CSX to integrate rail for material transportation
- Working closely with NCDOT regarding truck traffic in and out of the site
- Light-duty vehicles on site will be electric
- Most operational traffic will be at shift change





# WHAT WE ARE DOING ABOUT AIR QUALITY

## ▪ Emissions

- Title V Synthetic Minor Status
  - A large lithium plant but a small chemical plant
- We use safer materials than the Chinese producers
  - Replacing sulfuric acid with soda ash and lime
- Constant emissions monitoring and controls according to our permit requirements

## ▪ Dust

- Conveyors eliminate dust generated by trucks
- Products are fully enclosed in buildings
- Progressive land reclamation – no abandoned areas
- Paved roads around our plants
- Environmentally safe dust control technology
- In-pit crushing – below surrounding elevations





# WHAT WE ARE DOING ABOUT NOISE

- Large land buffer area from public roads, schools, homes and other businesses
- Berms and native plantings on site perimeter
- In-pit crushing and conveying
- Majority of our operations housed inside buildings to minimize noise
- Blasting will generally take place on regularly scheduled times
  - Vibration limits are regulated by the state and are lower than the required threshold
  - Deep Earth Logic is our blasting consultant – they are respected throughout North Carolina
  - We will monitor blasting impacts using seismographs to show that we comply with regulations
  - Residents can receive pre-blast surveys paid by Piedmont Lithium





# WHAT HAPPENS WHEN WE ARE **DONE?**

- Progressive reclamation as we operate
- Reclamation is bonded with the state
- Will emphasize native plant habitats
- We're responsible for this and we will pay for it
- Collaborative effort to determine what's best for Gaston County, ideas such as:
  - Parks
  - Walking / biking trails
  - Greenway
  - Recreation
  - Public use venues
  - Future Commercial or Industrial Site
  - Renewable Energy
  - A combination of these opportunities





# WORKING CLOSELY WITH LOCAL RESIDENTS AND PROPERTY OWNERS

- We've made agreements with 140 different landowners in the community
- Piedmont has invested ~\$27 million thus far in property in the area
- We treat property owners with respect, and we are happy to meet with community members and answer their questions
- Agreements grant us limited rights and operations won't begin until we complete the final transaction of properties
- Our team is approachable – we welcome visitors to our offices to learn more about our work. We can be reached at:

**Telephone:** (704) 461-8000

**Email:** [community@piedmontlithium.com](mailto:community@piedmontlithium.com)

**Facebook:** <https://facebook.com/PiedmontLithium>





# WHAT ARE WE BRINGING TO GASTON COUNTY?

- 500+ permanent jobs with Piedmont Lithium
  - Average salary and benefits of >\$90,000 per year
  - More than 500 construction jobs and 100's of jobs will be created by and for neighboring businesses
- Potential to bring the entire battery supply chain to Gaston County
- Increased tax base to support schools and other public initiatives
- Training, career path and economic security for generations of citizens
- Economic Impact Study to be completed in October 2021

*(Dr. John Connaughton, Professor at Belk College of Business, UNC Charlotte)*

