

ASX RELEASE | February 4, 2022 | ASX:PLL; NASDAQ:PLL

Piedmont Lithium Outlines 2022 Development Plans

Carolina Lithium Advancing Toward Final Investment Decision International Investments Support Plans for Additional U.S. Hydroxide Production

- Piedmont expects to double U.S. lithium hydroxide production to 60,000 tpy
 - 30,000 tpy at the fully integrated Carolina Lithium Project
 - 30,000 tpy at a second planned U.S. plant, with site selection expected in Q2 2022
 - Piedmont plans to produce or has offtake rights to an estimated 500,000 tpy of SC6 production
- Flagship Carolina Lithium Project is advancing toward a Final Investment Decision
 - Bankable Feasibility Study (BFS) published in December 2021
 - Economic Impact Study (EIS) published in January 2022
 - Key workstreams for 2022
 - Detailed engineering / Front End Engineering Design
 - **EPC** contractor selection
 - Final permitting and approvals
 - Strategic partnering and potential project debt financing
- Investments in strategic resources in Quebec and Ghana position Piedmont for future growth
 - Partnering with Sayona Mining (SYA: ASX) to develop one of Quebec's leading lithium businesses
 - Planned H1 2023 restart of North American Lithium's spodumene concentrate plant
 - Piedmont holds offtake rights to 50% of NAL production life-of-mine
 - Partnering with Atlantic Lithium (ALL: AIM) to develop a world-class spodumene resource in Africa
 - Expected increases to mineral resource estimates in 2022 based on recent drill results
 - Feasibility Study (FS) expected late-2022; investment decision to follow

BELMONT, N.C., February 3, 2022 - Piedmont Lithium Inc. ("Piedmont" or the "Company") (NASDAQ: PLL; ASX: PLL), a leading, diversified developer of lithium resources required to enable the U.S. electric vehicle supply chain, today provided an update on near-term growth initiatives with its projects in North Carolina, Quebec, and Ghana.

"We are developing our assets at an opportune time with global sales of electric vehicles (EVs) having doubled in 2021, and large U.S. battery plant investments being made by major automotive and battery companies. This electrification of the automotive market is a generational investment opportunity, and we are uniquely wellpositioned to capitalize on it," commented Piedmont Lithium President and CEO, Keith Phillips.

"We are advancing our flagship Carolina Lithium Project through key permitting, engineering, and project financing steps," Mr. Phillips added, "and we expect to achieve significant milestones this year. Our recent feasibility study confirmed the strategic nature of Carolina Lithium, with NPV exceeding \$2 billion and independent assessments confirming its impressive sustainability profile. We expect Carolina Lithium to be a critical factor in furthering the United States' progress toward lithium self-sufficiency.

"In addition to Carolina Lithium, we are progressing our two international investments and our plans to develop a second lithium hydroxide conversion plant. We are collaborating with our partner, Sayona Mining, to capitalize on strong lithium market conditions through the restart of spodumene concentrate production at our jointly owned North American Lithium (NAL) business in Quebec. Long lead equipment has been ordered and production is expected to commence in the first half of 2023. Exploration activities are continuing at the Ewoyaa Project in Ghana and, along with our partner Atlantic Lithium, we plan to complete a feasibility study in 2022, with first production possible in 2024. These significant spodumene assets support our plans to launch a second 30,000 tpy lithium hydroxide conversion plant. U.S. lithium demand is soaring, and domestic lithium hydroxide capacity is currently a fraction of what will be required in the mid-/late-2020s."



Carolina Lithium Project (North Carolina)

Piedmont published a Bankable Feasibility Study (FS) for its flagship, 100%-owned, fully integrated Carolina Lithium Project in December 2021. The FS contemplated production of 30,000 metric tons per year (tpy) of lithium hydroxide, 242,000 tpy of spodumene concentrate (SC6), as well as by-products quartz, feldspar, and mica. The Carolina Lithium Project is expected to be a highly sustainable low-cost producer given its location in Gaston County, North Carolina, and exceptional infrastructure, low power costs, proximity to important automotive and battery customers, and large markets for our by-product minerals.

The Carolina Lithium Project will be unique as the world's only fully integrated single campus spodumene ore-to-hydroxide project under development or in operation. The integrated site provides economic and environmental advantages, including the elimination of long transport distances for SC6 concentrate compared with competitor operations. The FS outlines strong project economics, including an after-tax net present value (NPV $_8$) of \$2.04 billion, after-tax internal rate of return of 27%, and steady-state EBITDA of more than \$450 million per year in the first ten years.

The results of an Economic Impact Study (EIS), which analyzed the potential local economic benefits of the Carolina Lithium Project, were announced in January 2022. The EIS, prepared by independent consultant Dr. John Connaughton of The University of North Carolina at Charlotte, identified the potential for the Project to contribute approximately 1,100 full time jobs in Gaston County and contribute approximately \$800 million in annual direct and indirect local economic output.

Piedmont is highly focused on advancing the Carolina Lithium Project towards a final investment decision and start of construction. Critical 2022 work streams include permitting, engineering and project financing.

Permitting Activities

In August 2021, we submitted a mining permit application to the North Carolina Department of Environmental Quality's (NCDEQ) Division of Energy, Minerals, and Land Resources (DEMLR). DEMLR held standard public hearings in November 2021 in connection with our mining permit application. As is customary, we received requests for additional information from DEMLR related to certain aspects of our mining permit application, and we are responding to those requests on a timely basis. Our engagement with the regulators is constructive and we look forward to a successful conclusion of this important process.

In January 2022, we submitted a determination request to NCDEQ's Division of Air Quality (DAQ) in connection with the air permit required for the Carolina Lithium Project. Upon receipt of a response from DAQ with respect to this request, we will proceed with an air permit application for the Project.

In September 2021, Gaston County updated its Unified Development Ordinance ("UDO"), which in part, defined operational requirements for new mines and quarries in the county. The UDO updates also established that new mines and quarries must operate on industrially zoned property in the county and will require a Special Use Permit approved by the Gaston County Board of Commissioners. We remain in pre-application consultation with Gaston County and will proceed with a re-zoning application and a special use permit application upon receipt of our DEMLR mining permit approval.

Contractor Selection and Design Engineering

Lithium Hydroxide Conversion Plant

We are evaluating bids for the front-end engineering design (FEED) for Carolina Lithium's 30,000 tpy lithium hydroxide conversion plant. We expect to launch FEED for our hydroxide plant in Q2 2022.

Spodumene Concentrator

Piedmont Lithium previously entered into an MOU with Primero Group - a world-leader in spodumene concentrate design, construction and operation - for the construction of our Carolina Lithium spodumene concentrator, by-products operations and associated infrastructure. The MOU addresses four areas of work scope:

- Feasibility Study completed
- Front End Engineering Design
- EPC delivery of the spodumene concentrator and by-products plants
- Contract operations of the spodumene concentrator and by-products plants

The terms of the MOU (1) provide incentives for Primero Group to achieve safety, schedule, budget, process performance, production, and recovery targets, and (2) create a delivery framework which significantly reduces technical, operational, and commercial risks associated with the spodumene concentrator. We expect to authorize Primero Group to start FEED of the Carolina Lithium spodumene concentrator on a schedule that aligns with the issuance of our state mining permit.

Contract Mining Operations

In 2021 and in connection with our FS, we solicited requests for proposal for contract mining services covering prestripping, drilling and blasting, loading and hauling of waste rock, and construction of mining infrastructure including in-pit crushing and conveyor systems. We received proposals from four contractors.

The FS assumes capital and operating costs that are based on contract mining services. As part of FEED, we will continue to refine the estimated costs associated with our mining operations, with a goal of awarding contract mining services to a preferred contractor in H1 2022.

Project Financing

We continue to evaluate a number of alternatives to fund construction of the Carolina Lithium Project.

Advanced Technology Vehicle Manufacturing Loan Program

In 2021, we submitted a loan application to the Loan Programs Office (LPO) of the U.S. Department of Energy (DOE) for potential funding of construction costs for eligible components of the Carolina Lithium Project under the Advanced Technology Vehicle Manufacturing Program. We are actively engaged with the LPO and expect their due diligence process to continue for several months. If approved by the LPO with terms acceptable to Piedmont, debtfunding from the DOE would significantly contribute to the capital needs of Carolina Lithium.

Strategic Partnering

In 2021, we retained the services of two investment banking firms, Evercore and J.P. Morgan, to act as advisors in a strategic investment process for the Carolina Lithium Project. We are currently engaged in discussions for a potential investment in our flagship Carolina Lithium Project, and we expect to conclude this process later this year.

Growth Projects

Abitibi Hub (Quebec)

Piedmont owns ~16.5% of Sayona Mining ("Sayona") (SYA: ASX) and 25% of Sayona Quebec, which has three lithium projects in the Abitibi region of Quebec, including Canada's most advanced lithium project, North American Lithium (NAL).

Sayona recently announced plans to restart spodumene concentrate production at NAL, with first production expected in H1 2023. Plans for NAL include capital improvements designed to improve throughput, concentrate grade, recovery, and mechanical availability. Detailed design engineering plans of the upgrades has started, and key long lead equipment orders have been placed to maintain the target start-up date. The NAL operation has a nameplate capacity of 180,000 tpy of SC6, and Piedmont has an offtake agreement in place for the greater of 50% of production, or 113,000 tpy.

Sayona Quebec is also completing studies related to the potential inclusion of spodumene ore from the Authier Project as supplementary feed into NAL's concentrate plant. A consolidated mineral resource update and a feasibility study for the combined operation are expected from Sayona in the coming months. Together with Sayona, we are studying longer-term options to produce lithium hydroxide in Quebec. In the event we develop conversion capacity jointly with Sayona in Quebec, SC6 deliveries from Authier and NAL would be prioritized to our jointly owned conversion plant.

Ewoyaa (Ghana)

Piedmont is earning a 50% interest in Atlantic Lithium's spodumene projects in Ghana, and owns a 9.9% stake in the parent company (ALL: AIM). Atlantic Lithium's flagship is the Ewoyaa Project, located near the Ghanaian coast approximately 70 miles from the deep-water port of Takoradi. Exploration activities are ongoing for the Ewoyaa Project, with recently announced drill results indicating potential to expand the existing high-grade mineral resource of 21.3Mt @1.31% Li₂O.

According to technical studies completed by Atlantic Lithium, the Ewoyaa project is expected to have attractive capital and operating costs and a relatively short construction and commissioning period. We are working with Atlantic Lithium to complete a prefeasibility study for Ewoyaa in H1 2022, with potential for first spodumene concentrate production during 2024. Atlantic Lithium forecasts that Ewoyaa is expected to produce ~300,000 tpy of SC6, and Piedmont has an offtake agreement in place for 50% of annual production at market prices.

Our strategy is that spodumene concentrate from Ewoyaa will support a second lithium hydroxide conversion plant.

U.S. Lithium Hydroxide Manufacturing Expansion to 60,000 tpy

Piedmont aspires to be America's leading lithium hydroxide producer and our international spodumene investments in 2021 were made with this objective in mind. Our plan is to advance two 30,000 tpy lithium hydroxide conversion facilities in the U.S., each proceeding on the fastest practical timetable.

Our Carolina Lithium Project is proceeding through its approval and engineering processes. We expect to complete a preliminary economic assessment (PEA) in Q1 2022 for a second 30,000 tpy LiOH plant (Plant Two) that will be substantially identical to the conversion facilities described in our Carolina Lithium Project FS. We expect to support our LiOH manufacturing at Plant Two with SC6 deliveries under our SC6 offtake agreement with Atlantic Lithium.

Site selection for Plant Two is underway, and we expect that a decision will be finalized in Q2 2022. Key considerations for site selection include available infrastructure, supply logistics (for SC6 and reagents), proximity to prospective automotive and battery customers, and anticipated permitting requirements.

About Piedmont Lithium

Piedmont Lithium (Nasdaq:PLL; ASX:PLL) is developing a world-class, multi-asset, integrated lithium business focused on enabling the transition to a net zero world and the creation of a clean energy economy in North America. The centerpiece of our operations, Carolina Lithium, is located in the renowned Carolina Tin-Spodumene Belt of North Carolina. Combining our U.S. assets with equally strategic and in-demand mineral resources, and production assets in Quebec and Ghana, positions us to be one of the largest, lowest cost, most sustainable producers of battery-grade lithium hydroxide in the world. We will also be the most strategically located to best serve the fast-growing North American electric vehicle supply chain. The unique geology, geography and proximity of our resources, production operations and customer base, will allow us to deliver valuable continuity of supply of a high-quality, sustainably produced lithium hydroxide from spodumene concentrate, preferred by most EV manufacturers. Our diversified operations will enable us to play a pivotal role in supporting America's move toward decarbonization and the electrification of transportation and energy storage. For more information, visit www.piedmontlithium.com.

Forward Looking Statements

This press release 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; strategy; and expectations regarding permitting. 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 related to our projects as well as the projects of our partners in Quebec and Ghana, (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 information in this announcement that relates to Production Targets and Financial Analysis of the Carolina Lithium Project is extracted from the Company's ASX announcement dated December 15, 2021, which is available 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, Exploration Targets, Production Targets, and related forecast financial information derived from Production Targets included in the original ASX announcements 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 announcements.

This announcement has been authorized for release by the Company's President & CEO, Keith D. Phillips.