

## Vale and GM Sign Long-Term Nickel Supply Agreement Critical to North American EV Supply Chain

Rio de Janeiro, November 17<sup>th</sup>, 2022 – Vale S.A (“Vale”) informs that its subsidiary Vale Canada Limited and General Motors Co. (“GM”), announced today they have signed a term sheet for the long-term supply of battery grade nickel sulfate from Vale’s proposed plant at Bécancour, Québec, Canada. This agreement secures for GM a supply of nickel sulfate from a U.S. free-trade partner to support its fast-growing EV production needs in North America.

Under terms of the agreement, Vale will supply battery grade nickel sulfate, equivalent to 25,000 metric tons per year of contained nickel, for use in GM’s Ultium battery cathodes, which will power a broad portfolio of electric vehicles. The amount of contained nickel is sufficient to supply approximately 350,000 EVs annually. Deliveries are targeted to commence in the second half of 2026.

As previously announced, Vale concluded the prefeasibility studies for the proposed nickel sulfate plant in June 2022 ([link](#)). Nickel sulfate is the chemical compound used in the production of pre-cathode active materials for nickel-based lithium-ion batteries.

“This is a momentous agreement for Vale Base Metals that brings a key partner in GM into this first-of-its-kind facility for Canada and North America,” said Vale Executive Vice President of Base Metals, Deshnee Naidoo. “The proposed nickel sulfate project would utilize high purity, low-carbon nickel from our Canadian refineries and is a natural extension for the business, offering diversified sales and a fast entry and anchor point into the North American electric vehicle market. We look forward to continuing engagements with the governments of Canada and Quebec on this strategic critical mineral project.”

Vale and GM have also agreed to study collaborative ways to partner on advanced technology development and commercialization pathways to harvest recycled metals.

This initiative highlights Vale’s uniquely strategic position to be the supplier of choice to the EV industry, leveraging its low-carbon footprint and market-leading position as North America’s largest producer of finished nickel.

Gustavo Duarte Pimenta  
Executive Officer of Investor Relations

Note: This communication was released following GM’s announcement this afternoon.

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