

Low-carbon nickel positions Vale well in North American, European electric vehicle market

- Carbon footprint of Vale Long Harbour rounds about one-third Nickel Institute average for Class 1 nickel;
- Vale meeting EV market needs for low-carbon products.

For immediate release

TORONTO – Low-carbon nickel produced by Vale on Canada’s east coast is poised to power the next generation of battery electric vehicles across North America and Europe.

Vale today announced that Intertek Group Plc, a leading assurance, inspection, product testing and certification company headquartered in London, England, has lent independent third-party limited assurance to the carbon footprint of nickel rounds produced at the Long Harbour refinery in Newfoundland, Canada.

Long Harbour rounds had a carbon footprint of 4.4 tonnes of CO₂ equivalent per tonne of nickel in 2020, the last complete year for which figures are available. That compares with the Nickel Institute average for Class 1 nickel of 13 tonnes CO₂ equivalent and 45 tonnes for Class 2.

“The low-carbon footprint of our Long Harbour rounds positions Vale well in the growing electric vehicle industry, in North America and beyond,” said Mark Travers, Executive Vice President for Base Metals at Vale. “This verification shows we are delivering low-carbon products and committed to responsible carbon data management and transparency,” said Maria Luiza Paiva, Vale’s Executive Vice President for Sustainability.

Carbon footprint was measured in accordance with the Product Life Cycle Accounting and Reporting Standard for the GHG Protocol, a comprehensive global standardized framework for measuring and managing greenhouse gas emissions. Vale assesses carbon footprint using the industry standard “cradle-to-gate” approach, comprising Scope 1 and 2 emissions generated during mining, milling, and refining, as well as upstream Scope 3 emissions from inputs. Carbon inventories are also subject to third-party audits.

In operation since 2014, the Long Harbour refinery produces nickel using hydrometallurgy rather than pyrometallurgy – meaning no smelters and no smokestacks. It delivers lower greenhouse gases and costs, and higher recoveries of valuable byproducts such as cobalt.

Vale has pledged up to US\$6 billion to cut absolute carbon emissions 33% by 2030 and lower value-chain emissions 15% by 2035, part of efforts to reach net zero emissions by 2050.

“Vale has the products and ESG credentials to help drive sustainability in the electric vehicle supply chain,” said Travers. “Customers in this fast-growing market want high-purity, responsibly sourced nickel, and Vale is ready to supply it.”