

Battery Boom

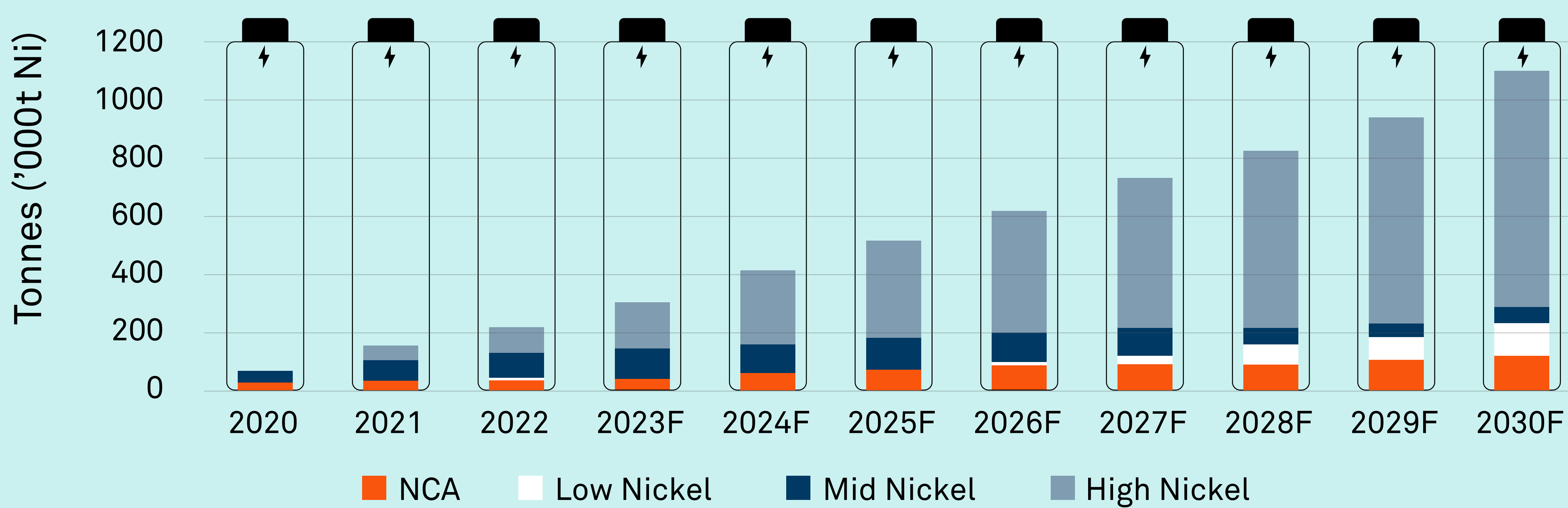
28

58.693

Ni

Nickel

NI CONTENT IN DIFFERENT TYPES OF EV BATTERIES



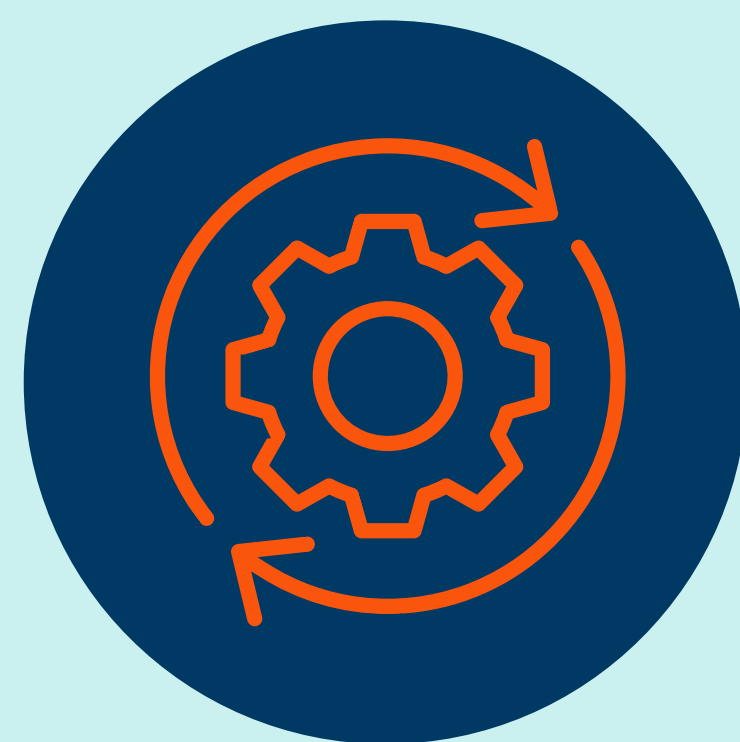
Source: Rho Motion, Macquarie Commodities Strategy, March 2023.



Nickel demand is projected to grow **15 times** between 2020 and 2030.¹



As of 2022, Indonesia and Australia hold the world's largest nickel shares at **21 million** metric tons each.²



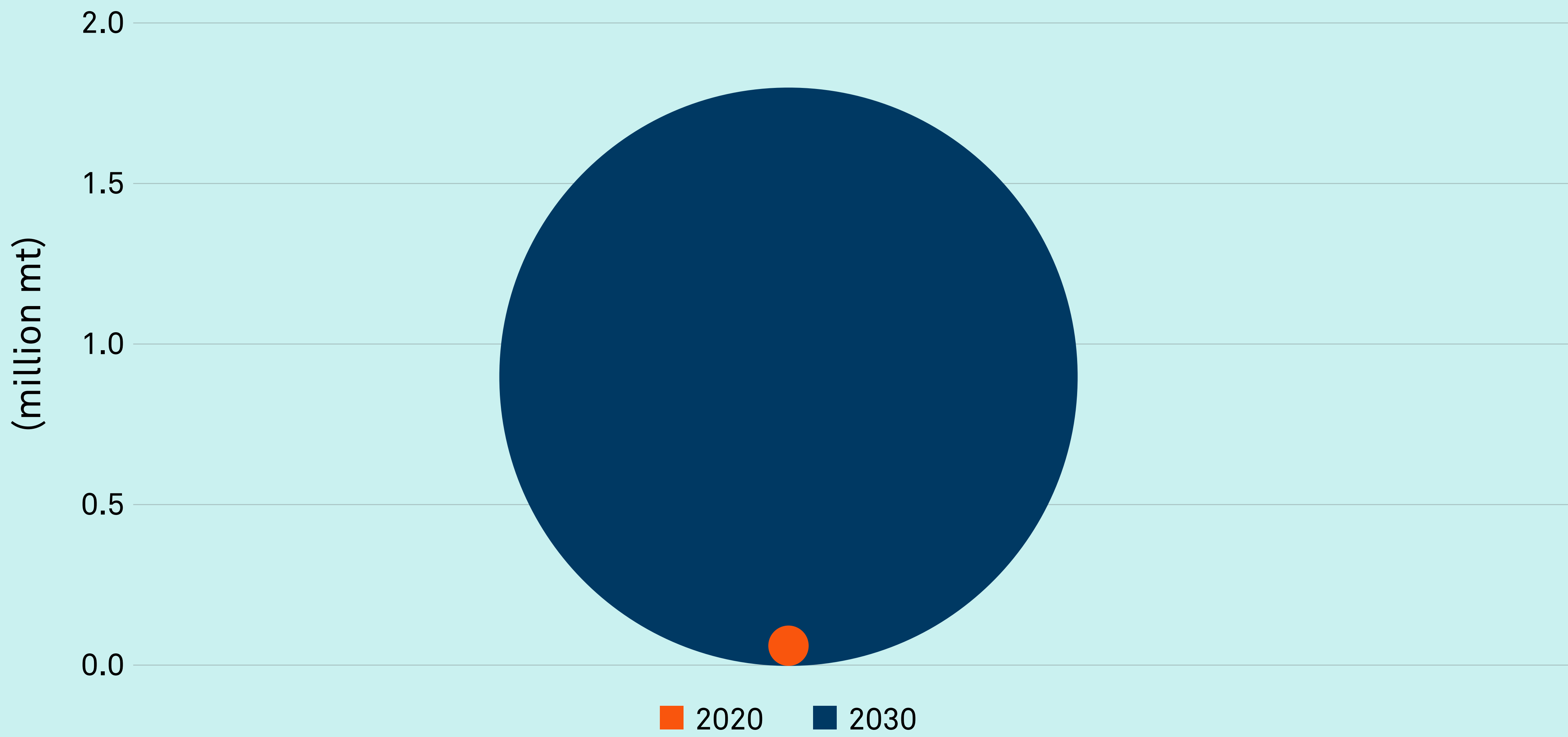
In 2022, an estimated **3.3 million** metric tons of nickel was produced worldwide.³

¹Rho Motion, Macquarie Strategy, March 2023.

²Statista. Reserves of nickel worldwide as of 2022, by country. February 2023.

³Statista, Mine production of nickel worldwide from 2010 to 2022. February 2023.

BATTERIES FUTURE ESTIMATION



Source: S&P Global, Platts Analytics, February 2022.



Batteries powering nickel demand

The commodities that go into batteries are in huge demand. We’re all trying to find and build out renewables and electric vehicles (EVs) across the globe, all at the same time. The problem with nickel is that there are few areas that you can get it.

One of them is Indonesia and they use High Pressure Acid Leaching (HPAL), which takes very low-grade nickel and makes it into class one – which is what you need for battery production.

HPAL is very carbon intensive. There are a lot of environmental concerns with Indonesia, given the impact on coral reef. We have to ask; Are our EV and green companies willing to see the carbon intensity of their product increase dramatically?

Paul Flood, head of mixed assets, Newton Investment Management

Disclosures

All investments involve risk, including the possible loss of principal. Certain investments involve greater or unique risks that should be considered along with the objectives, fees, and expenses before investing.

“Newton” and/or the “Newton Investment Management” brand refers to the following group of affiliated companies: Newton Investment Management Limited (NIM) and Newton Investment Management North America LLC (NIMNA). NIM is incorporated in the United Kingdom (Registered in England no. 1371973) and is authorized and regulated by the Financial Conduct Authority in the conduct of investment business. Both Newton firms are registered with the Securities and Exchange Commission (SEC) in the United States of America as an investment adviser under the Investment Advisers Act of 1940. Newton is a subsidiary of The Bank of New York Mellon Corporation. Newton’s investment advisory businesses are described in their Form ADVs, Part 1 and 2, which can be obtained from the SEC.gov website or obtained upon request.

BNY Mellon Investment Management is one of the world’s leading investment management organizations, encompassing BNY Mellon’s affiliated investment management firms and global distribution companies. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may also be used as a generic term to reference the corporation as a whole or its various subsidiaries generally.

This material has been provided for informational purposes only and should not be construed as investment advice or a recommendation of any particular investment product, strategy, investment manager or account arrangement, and should not serve as a primary basis for investment decisions. Prospective investors should consult a legal, tax or financial professional in order to determine whether any investment product, strategy or service is appropriate for their particular circumstances. Views expressed are those of the author stated and do not reflect views of other managers or the firm overall. Views are current as of the date of this publication and subject to change.

The information is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be and should not be interpreted as recommendations. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission.

Not FDIC-Insured | No Bank Guarantee | May Lose Value

© 2023 **BNY Mellon Securities Corporation**, distributor, 240 Greenwich Street, 9th Floor, New York, NY 10286

MARK-400732-2023-07-10