

COBALT & RECHARGEABLE BATTERIES

COBALT CHEMICALS ARE USED TO MANUFACTURE RECHARGEABLE BATTERIES. This application represents the single largest use for cobalt and the primary driver of the market. Rechargeable batteries experienced rapid growth over the past two decades due to their use in portable electronic devices. Growth in the need for batteries is accelerating from the transformative evolution to electric vehicles and the need for stationary storage of power from renewable energy sources and off-peak charging from the electrical grid.

LITHIUM-ION BATTERIES: Advanced, Lighter, Higher Energy Density

Lithium Nickel Cobalt Aluminum Oxide (NCA)



5-9%

COBALT BY WEIGHT IN CATHODE

Highest Energy Density –
Use in EVs & Grid Storage



Lithium Nickel Manganese Cobalt Oxide (NMC)



5-20%

COBALT BY WEIGHT IN CATHODE

Use in power tools, e-bikes,
EVs & grid storage



Lithium Cobalt Oxide (LCO)



UP TO 60%

COBALT BY WEIGHT IN CATHODE

Ideal for cell phones,
laptops, cameras.



BY THE YEAR **2020**

Cobalt use in battery applications alone could be greater than the entire world market for refined cobalt in 2015!



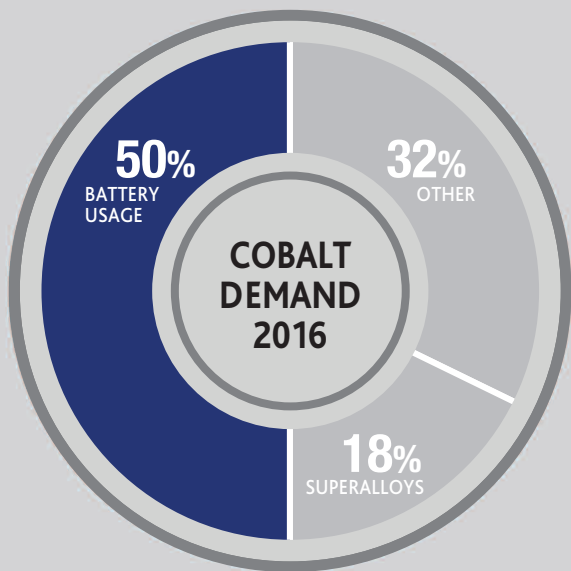
Photo credit: Tesla

Fortune Minerals is developing the NICO Project, comprised of a proposed mine and mill in Canada's Northwest Territories & refinery in Saskatchewan, to become a vertically integrated producer of cobalt chemicals for the lithium-ion battery industry with over a million ounces of gold and 12% of global bismuth reserves as by-products. NICO will stand out as a North American cobalt chemical producer that is independent of the Congo, China, and copper & nickel primary production.

RECHARGEABLE BATTERIES *DRIVING* COBALT DEMAND

BATTERY USAGE ACCOUNTS FOR 50% OF COBALT DEMAND

(Source: Darton Commodities)



NICKEL-METAL HYDRIDE BATTERIES

15% UP TO 15%
COBALT BY WEIGHT



15kg

UP TO 15KG OF COBALT IN A TYPICAL
LITHIUM-ION CAR BATTERY

LITHIUM-ION BATTERIES

60% UP TO 60%
COBALT BY WEIGHT

Cobalt is recognized as strategically important by both the US and European Union as it is critical to a number of metallurgical and chemical products but is susceptible to supply concerns.



63% of mined cobalt is sourced from the Congo

China refines **54%** of the world's cobalt

98% of the world's cobalt is mined as a by-product
of copper & nickel

Tesla's Model S uses the NCA cathode chemistry which has the highest energy density among lithium-ion batteries.

Tesla's first Gigafactory in Nevada, U.S.A. is expected to produce 500,000 lithium-ion batteries by 2018 – more than were produced globally in 2013! These batteries will be used in their electric vehicles and stationary storage applications for homes, companies and utilities.



**"I will announce locations for between two and four
Gigafactories later this year – probably four."**

– Elon Musk April 2017

Photo credit: Tesla

This document contains forward-looking information. This forward-looking information includes statements with respect to, among other things, the proposed development of the Saskatchewan Metals Processing Plant ("SMPP"), Tesla's plans to develop a lithium ion plant in the United States and the anticipated production of lithium ion batteries from such plant. Forward-looking information is based on the opinions and estimates of management as well as certain assumptions at the date the information is given (including, in respect of the forward-looking information contained in this press release, assumptions regarding the ability of Fortune Minerals Limited (the "Company") to arrange necessary financing for its NICO gold-cobalt-bismuth-copper project and the SMPP and obtain all necessary permits for the NICO project and the SMPP and assumptions regarding Tesla's development of and production from its proposed lithium ion plant). However, such forward-looking information is subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information. These factors include the inherent risks involved in the exploration and development of mineral properties, the risk that the Company may not be able to arrange the necessary financing to construct and operate the NICO mine or the SMPP, uncertainties with respect to the receipt or timing of required permits for the development of the NICO project or the SMPP, the possibility of delays in the commencement of production from the NICO project or construction of the SMPP, the risk that Tesla may not complete the construction of its proposed lithium ion plant, the risk that the production from such plant even if it is completed will be less than anticipated and other factors. Readers are cautioned to not place undue reliance on forward-looking information because it is possible that predictions, forecasts, projections and other forms of forward-looking information will not be achieved by the Company. The forward-looking information contained herein is made as of the date hereof and the Company assumes no responsibility to update or revise it to reflect new events or circumstances, except as required by law.



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