

Will Alaska Lead on National Mineral Security?

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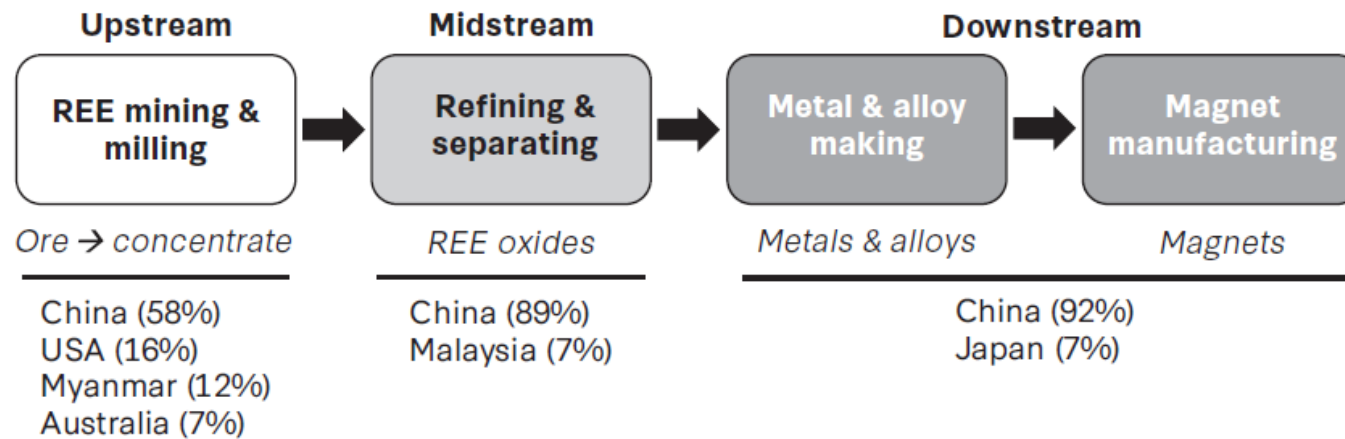
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TABLE 1 SHARES OF GLOBAL EXTRACTION OF RARE EARTH ELEMENTS

	2010	2022
China	95%	60%
United States	0%	16%

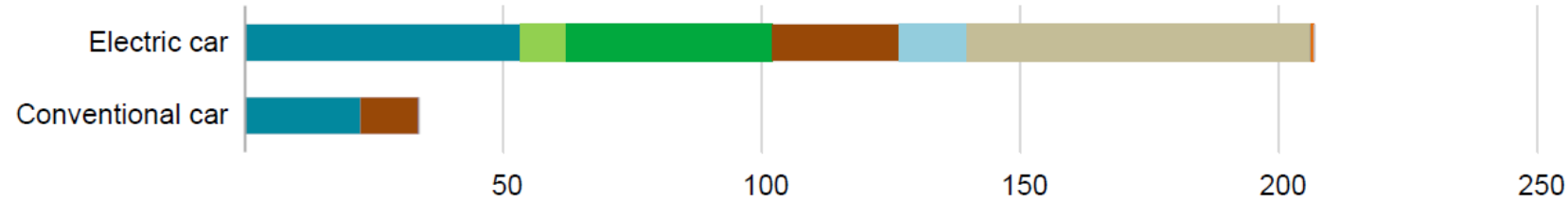
FIGURE 1 Rare earth elements supply chain and market share (2022)



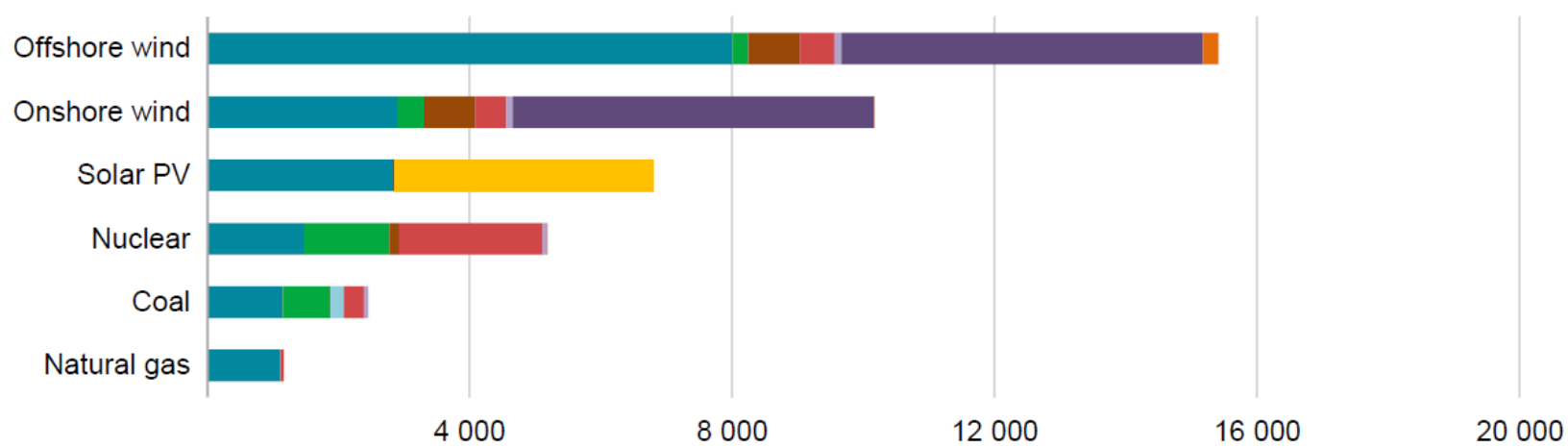
The rapid deployment of clean energy technologies as part of energy transitions implies a significant increase in demand for minerals

Minerals used in selected clean energy technologies

Transport (kg/vehicle)



Power generation (kg/MW)



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Notes: kg = kilogramme; MW = megawatt. Steel and aluminium not included. See Chapter 1 and Annex for details on the assumptions and methodologies.

Did you know?



silica COPPER **GOLD** diamonds **titanium** **TIN** MOLYBDENUM
indium IRON **IRIDIUM** zirconium ZINC **lead** YTTRIUM **vanadium**
ALUMINUM **boron** chromium nickel **TUNGSTEN** oil & gas

Photo source: www.pdac.ca/miningmatters

FEBRUARY 24, 2021

Executive Order on America's Supply Chains



BRIEFING ROOM

PRESIDENTIAL ACTIONS

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Policy. The United States needs resilient, diverse, and secure supply chains to ensure our economic prosperity and national security.

Pandemics and other biological threats, cyber-attacks, climate shocks and extreme weather events, terrorist attacks, geopolitical and economic competition, and other conditions can reduce critical manufacturing capacity

JOSEPH R. BIDEN JR.

THE WHITE HOUSE,
February 24, 2021.

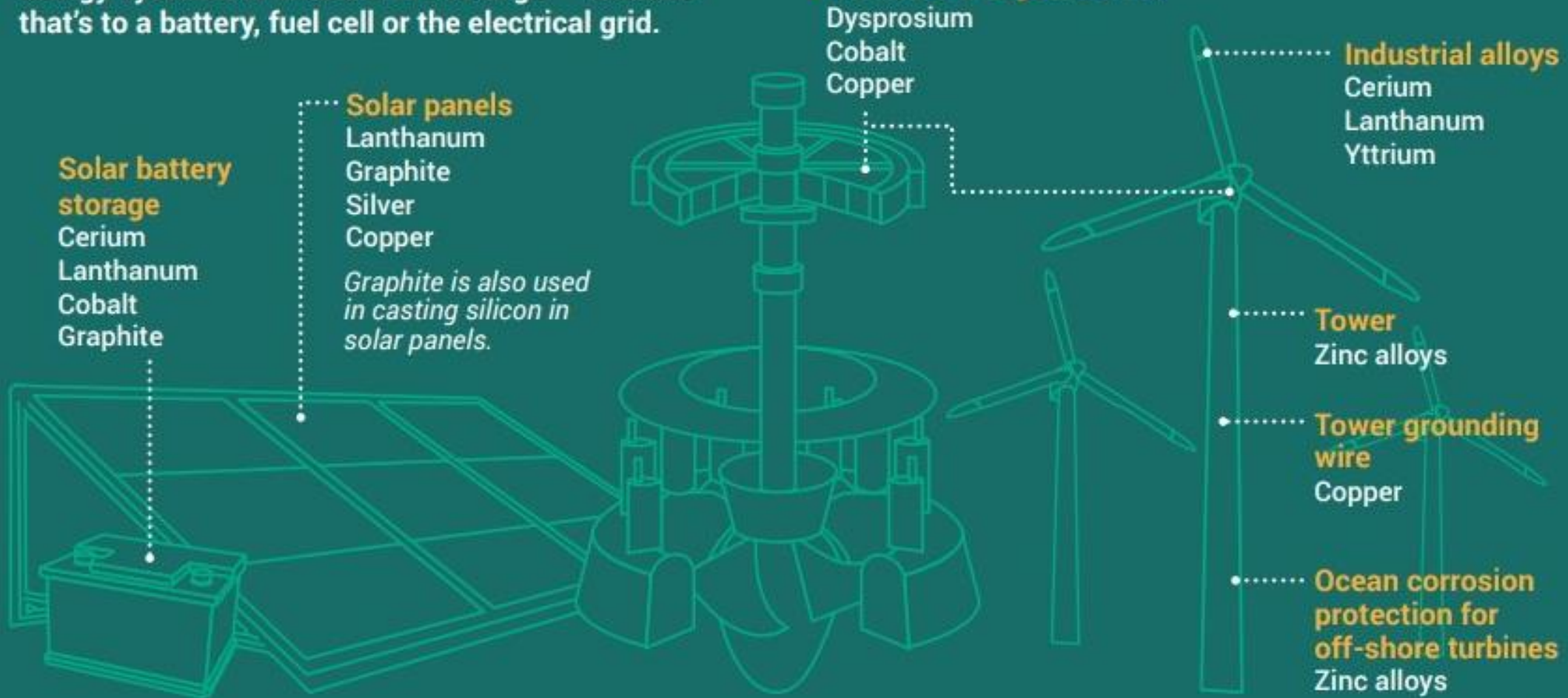
Biden cracks down on drilling and mining

Sept. 7, 2023 | Updated Thu., Sept. 7, 2023 at 7:24 p.m.

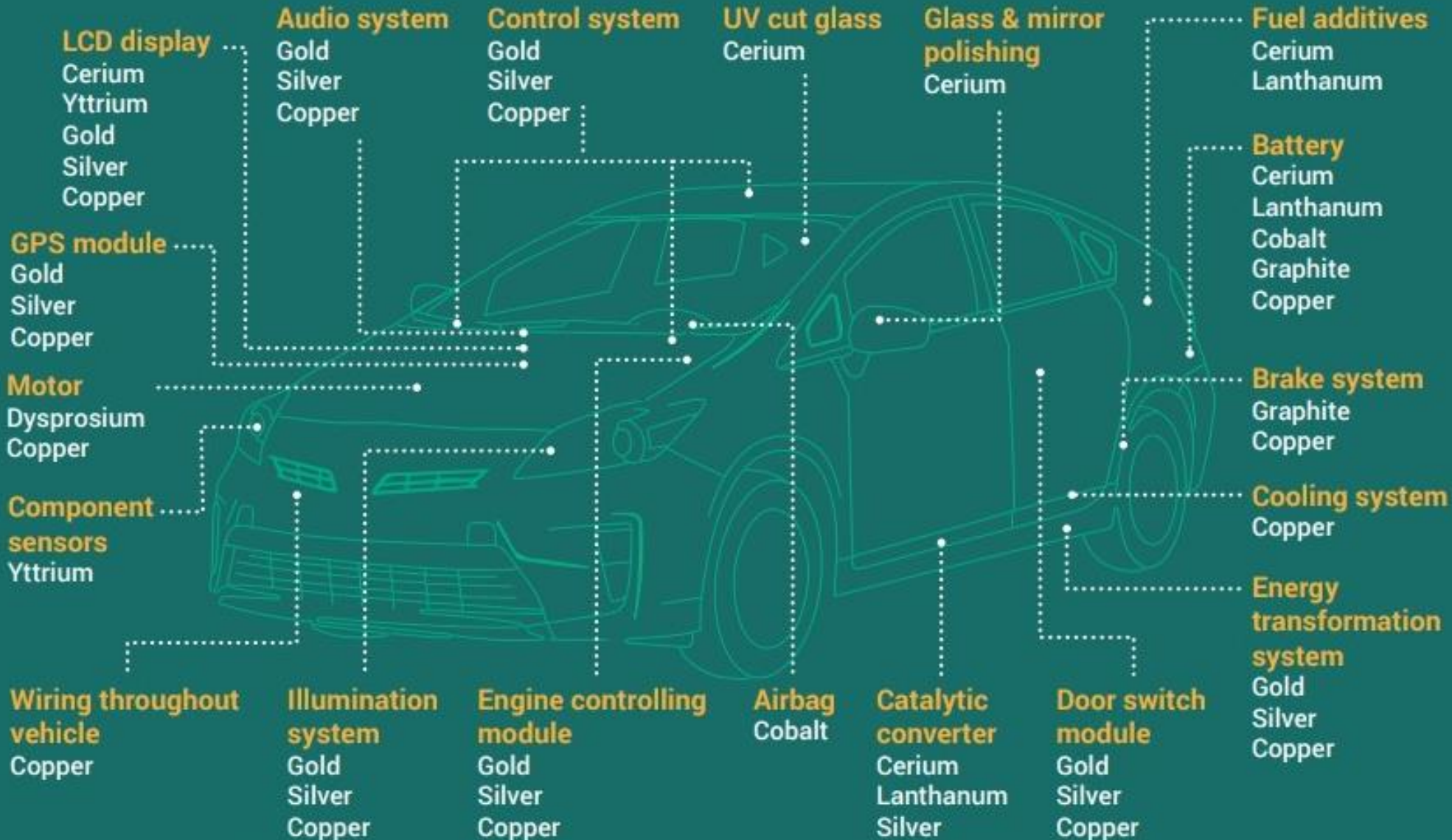


Alaska Minerals in Renewable Energy

Copper in wires and cables also plays a central role carrying the electrical current from renewable energy systems to where it needs to go – whether that's to a battery, fuel cell or the electrical grid.



Alaska Minerals in Electric Vehicles



***Rechargeable Zinc-ion batteries, or RZIBs,** are promising energy storage replacements for lithium-ion batteries based on their relatively high energy density and low cost, negligible environmental impact, and increased safety.

All AK infographic images courtesy of AK Bureau of Land Management