

Copper & Clean Energy

Copper is a vital component of technologies that will power the world's transition to clean energy. Fortunately, Resolution Copper has the potential to supply up to **one-quarter of the nation's total copper demand**, providing a homegrown source for American manufacturers and driving innovation and economic opportunities in Arizona and across the country.

Renewable Energy Driving a Global Copper Crunch

The U.S. was the fourth largest copper-producing nation in 2019, after Chile, Peru, and China. But analysts estimate global copper demand from wind, solar, EVs and battery applications will increase by **600%-900% by 2030**, to as much as 8.7 million tons.*



Solar: PV solar panels contain approximately **5.5 tons of copper per MW**. The Resolution Copper project could provide enough copper to meet the entire world's projected solar uptake through 2050, adding approximately 1.2 TW of new solar capacity.**



Wind: The US is currently leading the world in wind energy production, but a lack of copper may thwart this industry's expansion efforts. A single wind farm requires **between 4 to 15 million pounds of copper*****. The Resolution Copper project could meet the entire projected global need for wind energy through the life of the mine, enabling approximately 5.5 TW of wind power growth.****

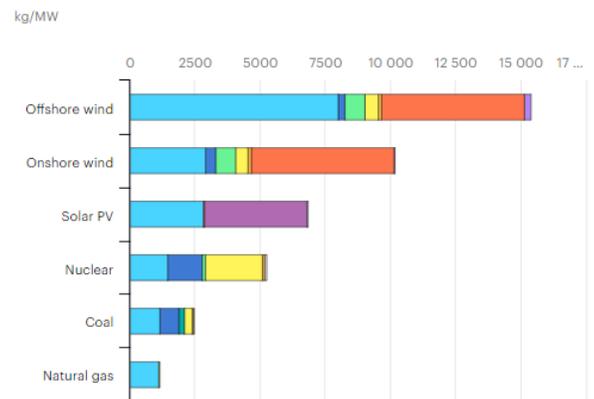


Energy Storage: Storing energy reserves requires massive amounts of copper. Grid energy storage installations require between **0.3 to 4 tons of copper per MW**.****



Electric Vehicles: Electric vehicles use **four times** more copper than conventional automobiles, and the EV car field is only growing. The Resolution Copper project has enough copper to manufacture **almost 220 million EVs** (about half the projected global supply) by 2040.*****

Minerals used in clean energy technologies compared to other power generation sources



* [Goldman Sachs Commodities Research \(April 2021\)](#)
 ** Calculation based on [SEIA & Wood Mackenzie analysis \(March 2020\)](#)
 *** [Copper Development Association \(May 2019\)](#)
 **** Calculation based on [Wood Mackenzie analysis \(October 2019\)](#)
 ***** Calculation based on [Bloomberg NEF EVO report \(May 2020\)](#)

Source: "The Role of Critical Minerals in Clean Energy Transitions," IEA (May 2021)

Renewable energy sources require more copper than traditional energy sources. With a strong domestic supply, the U.S. can be a leader in the clean energy transition.

Learn more: www.resolutioncopper.com