11,000 Years of Copper Use

Copper's use in human history spans thousands of years, highlighting its importance and adaptability.

- 8700 BC: Native copper was first worked into sheets, shapes, and ornaments.
- 4500–3500 BC: Copper was used in agricultural societies.
- 4000 BC: Copper tools were used in Mesopotamia.
- 2750 BC: Copper was used in ancient Egypt to build temples.
- 1400 BC: Copper was used in Lydia, an ancient kingdom.
- 800–600 BC: Copper was used in Greek and Roman civilizations for tools, weapons, and scientific instruments.
- 1000–1800: Copper was used in Europe during the Renaissance.
- 1900–1950: Copper was used in the construction of skyscrapers and other structures.
- 1950–2000: Copper was used in the production of computer chips and other electronic devices.
- 2000–2010: Copper was used in the development of renewable energy technologies.
- 2010–Present: Copper is used in the transition to a clean energy economy.

Copper's Role in the Modern Economy

Copper is a vital resource in the modern economy, used in a variety of applications.

- EVs: Copper is used in EVs for wires, cables, and batteries.
- EV motors: Copper is used in EV motors for rotors and coils.
- Optical fibers: Copper is used in optical fibers for telecommunications.
- Power grids: Copper is used in power grids for conductors and transformers.
- Solar panels: Copper is used in solar panels for wiring and connectors.
- Wind turbines: Copper is used in wind turbines for rotors and cables.
- HVAC systems: Copper is used in HVAC systems for pipes and condensers.

Copper's Use in Different Industries

Copper is used in a wide range of industries, from construction and manufacturing to electronics and transportation.

- Construction: Copper is used in construction for roofing and plumbing.
- Manufacturing: Copper is used in manufacturing for parts and components.
- Electronics: Copper is used in electronics for wires and connectors.
- Transportation: Copper is used in transportation for EVs and airport equipment.
- Medical: Copper is used in medical for surgical tools and sterilization.
- Electrical: Copper is used in electrical for wires and cables.
- Industrial: Copper is used in industrial for machinery and equipment.

Copper's Supply Risk

Copper is subject to supply risk due to its criticality and importance to the modern economy.

- Supply risk is often assessed using a methodology that takes into account factors such as economic exposure, economic vulnerability, and potential exposure.
- Supply risk scores for copper indicate its criticality and vulnerability to disruption.
- A score of 0.387 for 2021 suggests that copper is subject to supply risk.

Copper Development Association

The Copper Development Association is committed to promoting the benefits of copper and its alloys to society.

- The CDA is committed to the sustainable use of copper.
- The CDA is committed to enhancing and expanding the copper industry.
- The CDA is committed to addressing the challenges of today and tomorrow.

Why Copper is Beyond Critical

Copper is beyond critical, and should be on the official Critical Minerals list, especially as demand increases.