

# Copper:

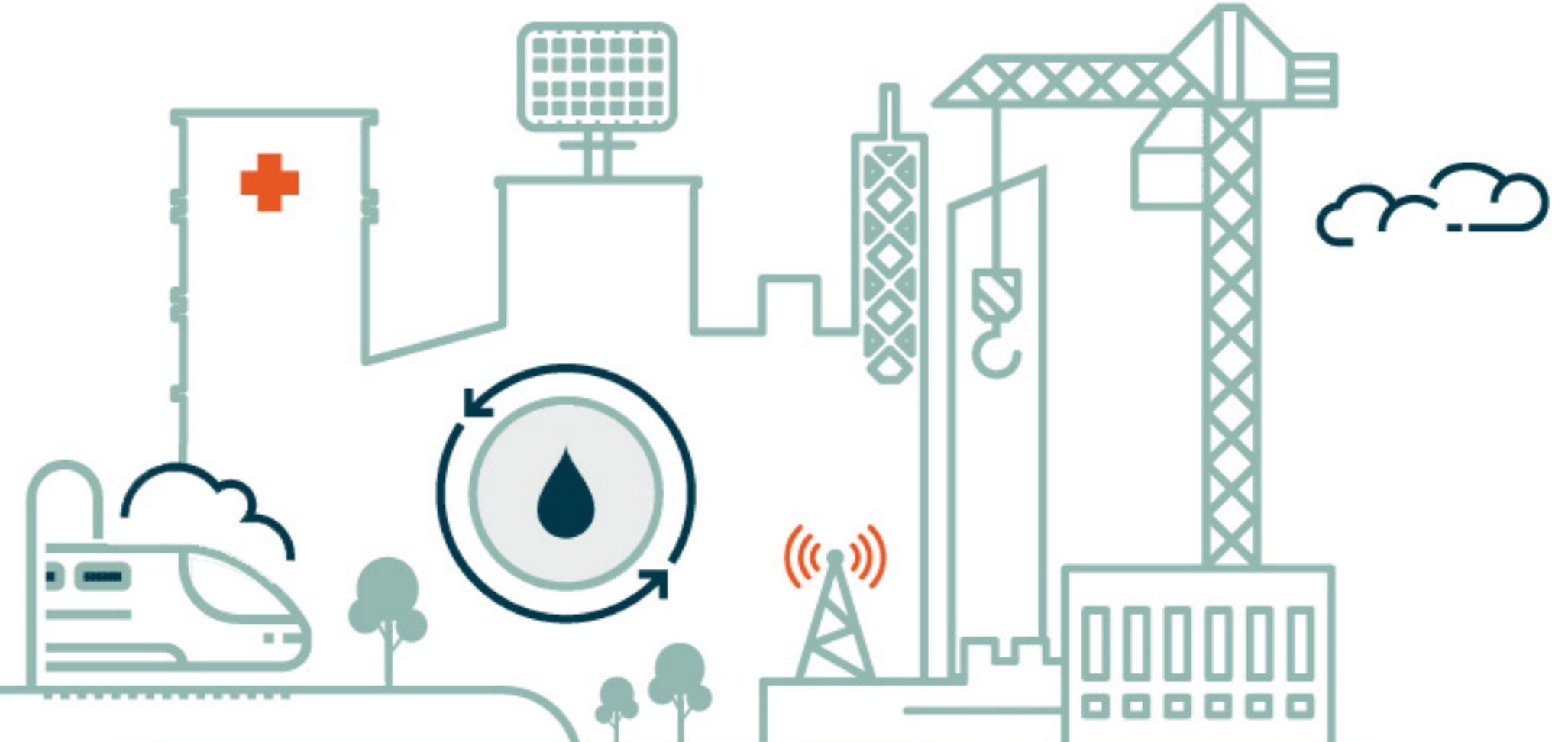
## ESSENTIAL FOR OUR FUTURE

Minerals and metals form the backbone of the modern world. No matter where you may call home, you can find copper and materials everywhere you look in your community. Healthcare workers, transportation providers, educators and delivery services rely on copper for critical equipment and for crucial functions, such as electronic devices, electricity delivery and storage, transportation, communication and safe drinking water.

From mines and smelters/refiners through to fabricators, the copper industry is committed to providing the raw material and the finished products to assist society through any challenge.

### Infrastructure

Infrastructure relies on copper because of its reliability, efficiency and performance. Copper's properties are vital for a range of activities including safe energy transmission and efficient transport.



- RAILWAYS
- ELECTRICAL GRIDS  
(production and delivery of energy and energy storage)
- TELECOMMUNICATIONS  
(data centers, networks, cell towers)
- WATER SUPPLY
- HEALTHCARE
- CONSTRUCTION

### Food Chain

Copper not only helps farmers produce more and get products to market, it also helps grocers keep food fresher for longer periods of time.

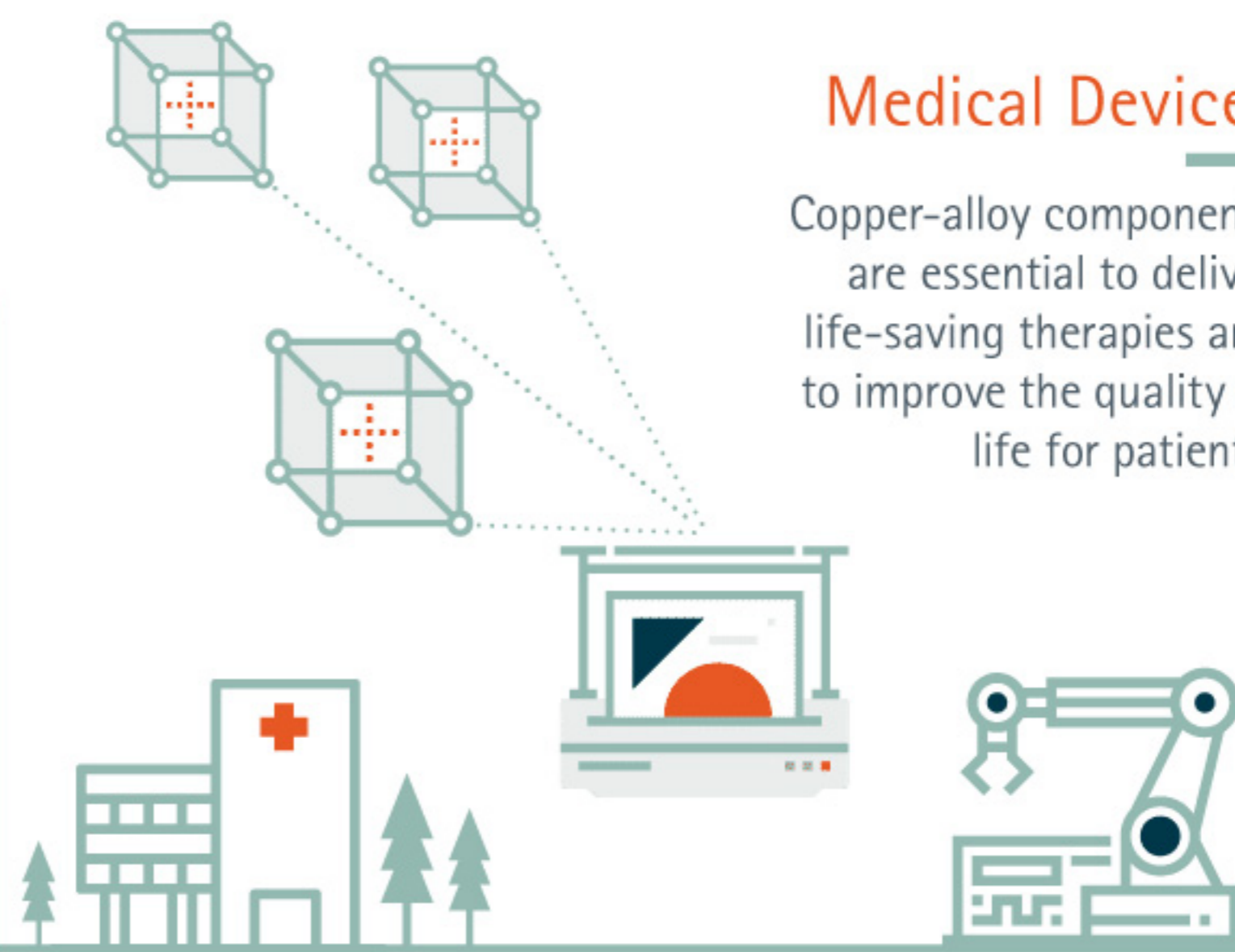
- REFRIGERATION SYSTEMS
- FERTILIZERS
- CLEAN WATER  
(water and waste systems)
- ENERGY  
(to power equipment)



### Medical Devices

Copper-alloy components are essential to deliver life-saving therapies and to improve the quality of life for patients.

- HEARING and VISUAL AIDS
- DIAGNOSTIC DEVICES  
(EEG, MRT)
- SURGICAL ROBOTS  
(care and medical robots)
- IMPLANTS
- 3D PRINTING  
(human tissues and active implants)
- VENTILATOR COMPONENTS



### Manufacturing

Copper is essential for manufacturing industries that keep global economies working.



- DEFENSE
- AEROSPACE
- AUTOMOTIVE
- CLEAN TECH
- COMMUNICATION

### Technology

Critical minerals, like copper, keep us connected to each other and working more efficiently.

- SMART PHONES
- COMPUTERS and LAPTOPS
- ARTIFICIAL INTELLIGENCE  
(smart buildings - heating and cooling systems)
- RENEWABLE ENERGY GENERATION  
(solar panels and wind turbines)



For more information on copper uses and applications, visit [copperalliance.org](http://copperalliance.org).