

# INGREDIENTS OF A LOW-CARBON ECONOMY

Metals and minerals in IFC's mining portfolio are necessary ingredients for solar panels, wind turbines, smart grids, lightweight vehicles, rechargeable batteries, fuel cells, and other green consumer and industrial products.



## Copper

Excellent conductor of electricity and heat, vital to the power sector. Also used in smartphones, cars, water pipes, computers, and televisions.



## Bauxite

Main ingredient of aluminum metal, which is used in airplanes, computers, household appliances, and cars, including fuel-efficient and lightweight vehicles.



## Gold

Used in jewelry and as a component of smartphones, computers, spacecraft, and airplane engines. Also used as an investment and reserve currency.



## Zinc

Used to galvanize other metals to prevent rusting. Galvanized steel is used for car bodies and bridges. Zinc oxide is used in paints and plastics. Zinc sulfide is used in x-ray screens.



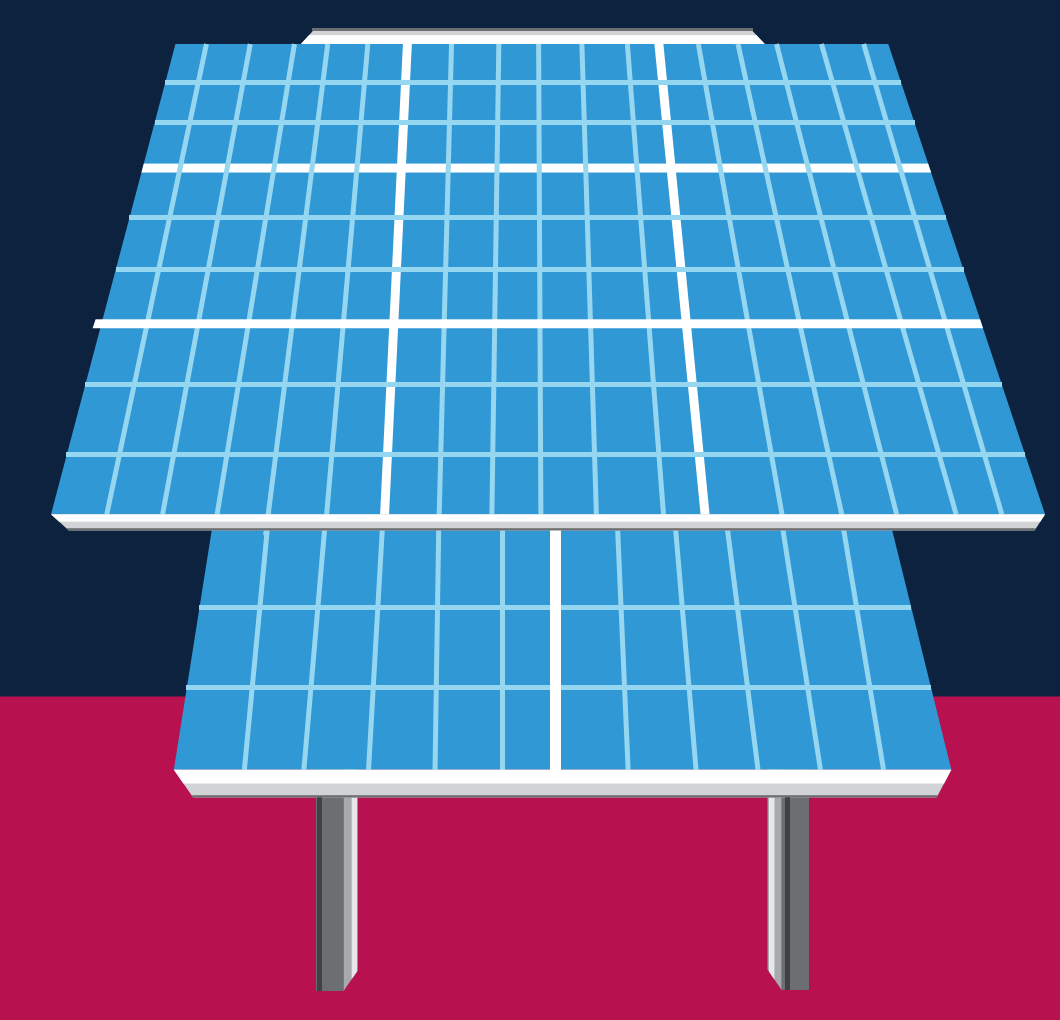
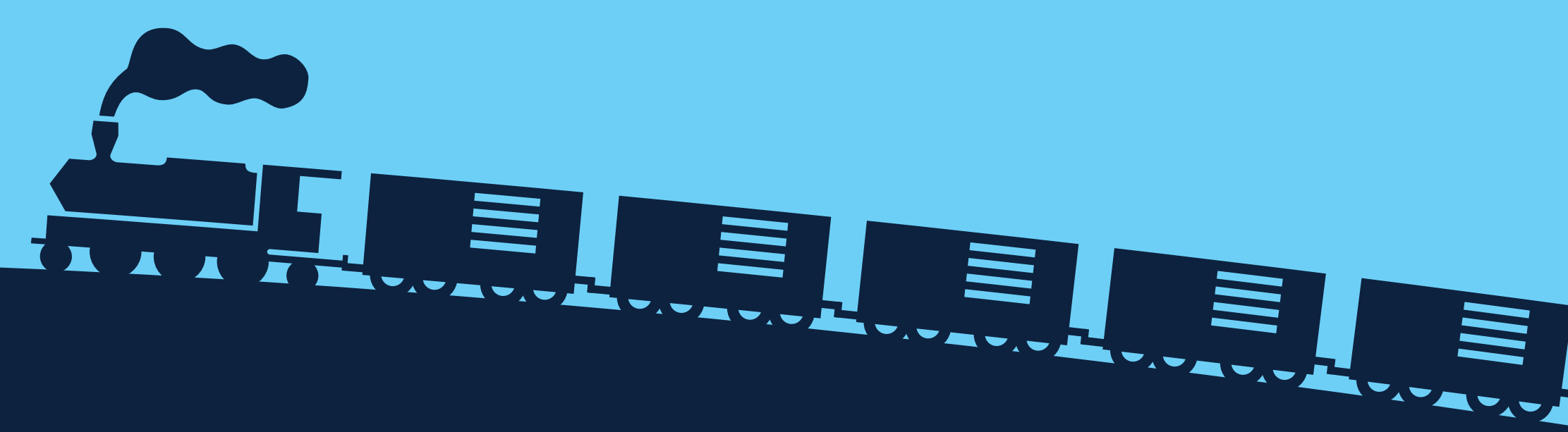
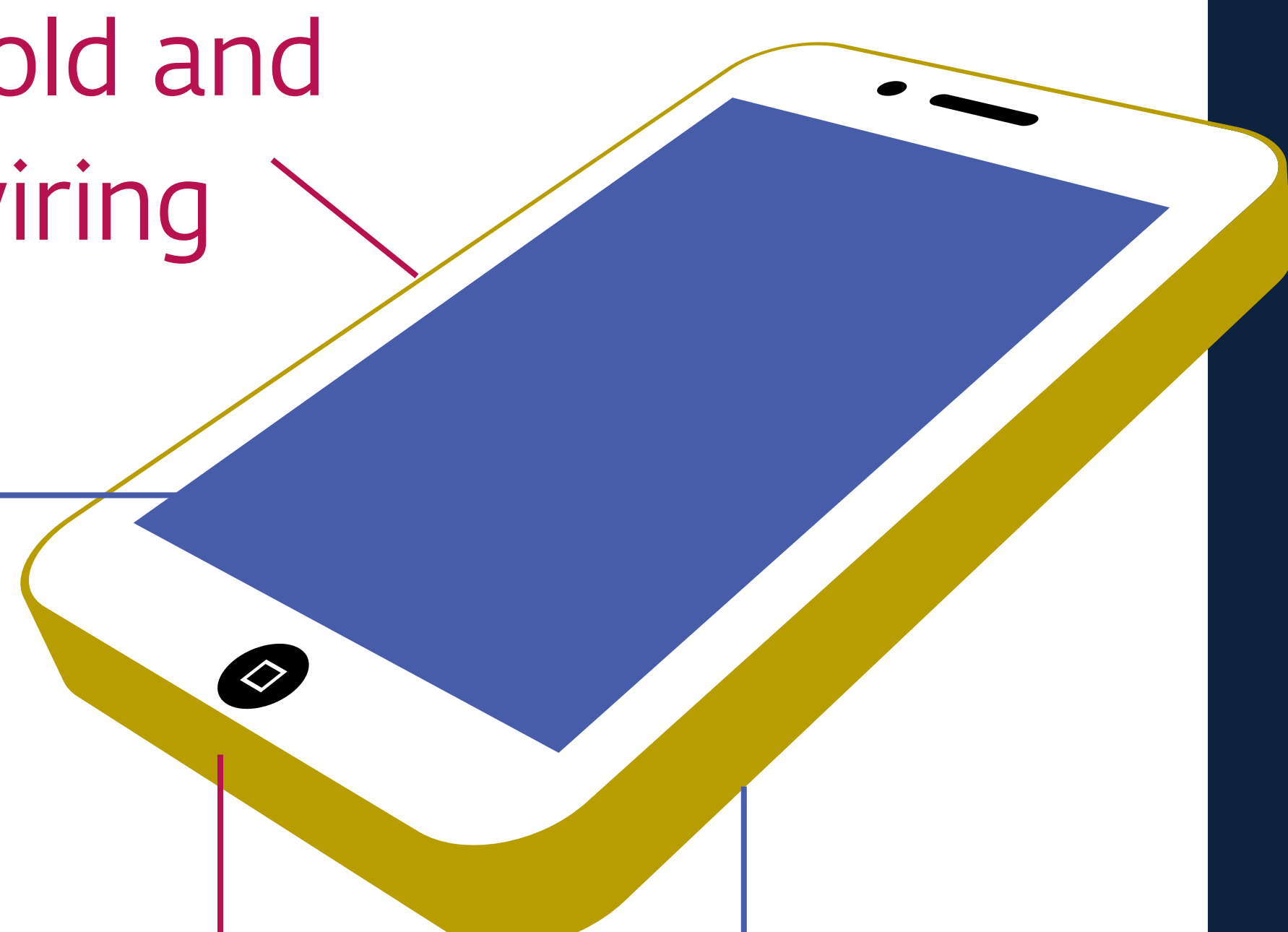
## In Your Smartphone

Copper, gold and silver in wiring

Rare earths in vibration unit, screen, speakers

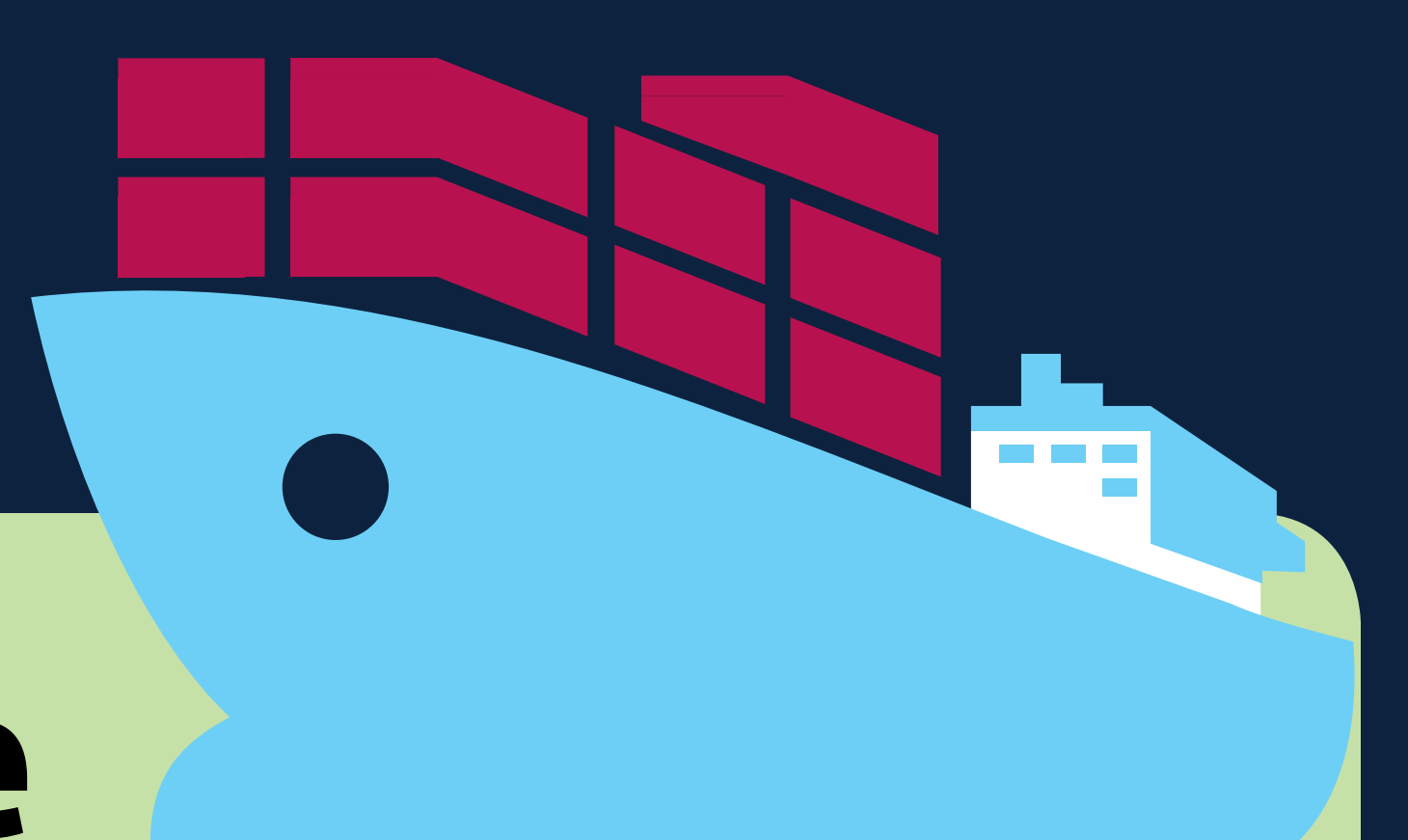
Nickel in microphone

Aluminum in metal case



## Silver

Used in solar panels, electrical switches, batteries, appliances and cars.



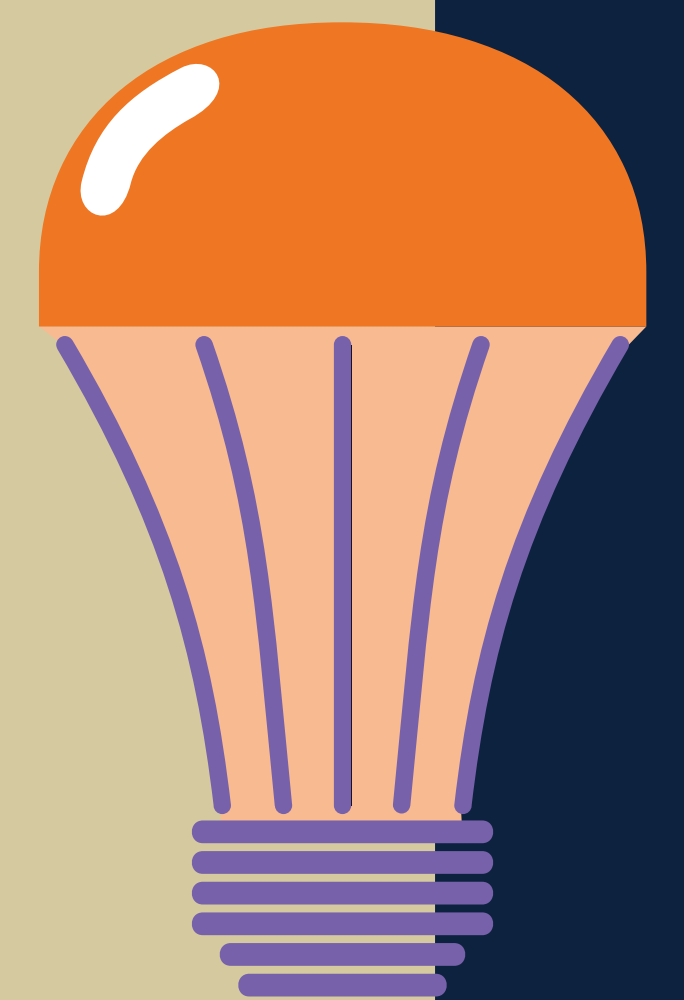
## Iron Ore

Used to make steel—a necessity for urban growth and construction. Steel is used in wind turbines, cars, ships, furniture, tools, appliances, and bicycles.



## Rare Earths

Group of metallic elements that are widely used in energy and lighting technologies, including LED light bulbs. Their oxides are also used in fuel cells and wind turbines.



## Nickel

Used to make stainless steel and other corrosion-resistant alloys. Nickel is an ingredient of smartphones, medical equipment, magnets, and rechargeable batteries.



## Diamonds

Used in luxury goods and in crushed form as abrasives. Diamonds are the world's hardest substance and have unrivalled thermal conductivity and inertness, making them ideal for next-generation technology.

