



SHAPE YOUR WORLD

Minerals are essential to everyday life

The minerals industry at a glance



400m metric tonnes produced annually



£5.8bn added to the economy



81K people directly employed



2K active sites & plants



28% total market is recycled aggregates



5K hectares of restored sites for public use



4m+ ppl worldwide in quarrying

The minerals industry plays a vital part in our everyday lives. Mineral products are all around you. From your smart phone and TV screen, the crockery and cutlery you use daily, wind turbines and solar panels, to the roads, cars, electric vehicles, trains, buildings and built environment, they're everywhere.

- **Construction:** homes, schools, hospitals
- **Transport:** roads, railways, airports
- **Technology:** phones, batteries
- **Energy transition:** wind turbines, solar panels, electric vehicles

A BREAKDOWN OF THE CRITICAL

METALS IN A SMARTPHONE

Some vital metals used to build these devices are considered at risk due to geological scarcity, geopolitical issues or trade policy.

This infographic details the critical metals that you carry in your pocket.

ALKALI METAL ALKALINE EARTH TRANSITION METAL BASIC METAL LANTHANOID

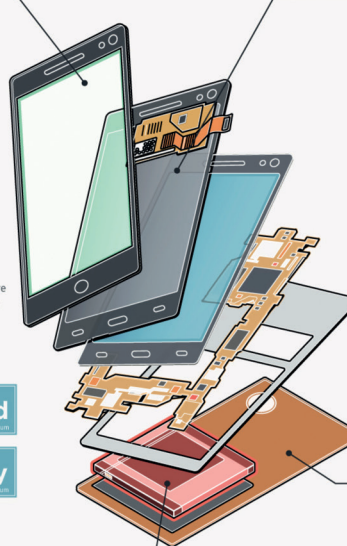
TOUCH SCREEN

It contains a thin layer of **indium** tin oxide, highly conductive and transparent, allowing the screen to function as a touch screen.



MICROPHONE, SPEAKERS, VIBRATION UNIT

Nickel is used in the microphone diaphragm (that vibrates in response to sound waves). Alloys containing **neodymium**, **praseodymium** and **gadolinium** are used in the magnets contained in the speaker and microphone. **Neodymium**, **terbium** and **dysprosium** are used in the vibration unit.



DISPLAY

The display contains several **rare earth elements**. Small quantities are used to produce the colors on the liquid crystal display. Some give the screen its glow.



ELECTRONICS

Nickel is used in electrical connections. **Gallium** is used in semiconductors. **Tantalum** is the major component of micro capacitors, used for filtering and frequency tuning.



CASING

Nickel reduces electromagnetic interference. **Magnesium** alloys are superior at electromagnetic interference (EMI) shielding.



BATTERY

The majority of smartphones use **lithium-ion** batteries.



The Earth's natural resources power our everyday lives. VC Elements breaks down the building blocks of the universe.

We live in a material world.

What are critical minerals?

Find out more from UK Critical Minerals:



What are essential materials?

Find out more from the Mineral Products Association:



Why does the industry matter?

Economic importance

The UK minerals industry is a vital foundation of the economy, supporting national infrastructure, construction, manufacturing, energy, and regional employment across the country.

- The UK minerals industry supplies billions of tonnes of materials annually
- Supports thousands of jobs across all regions (urban and rural)
- Underpins sectors like construction, infrastructure, technology and manufacturing

Sustainability and environment

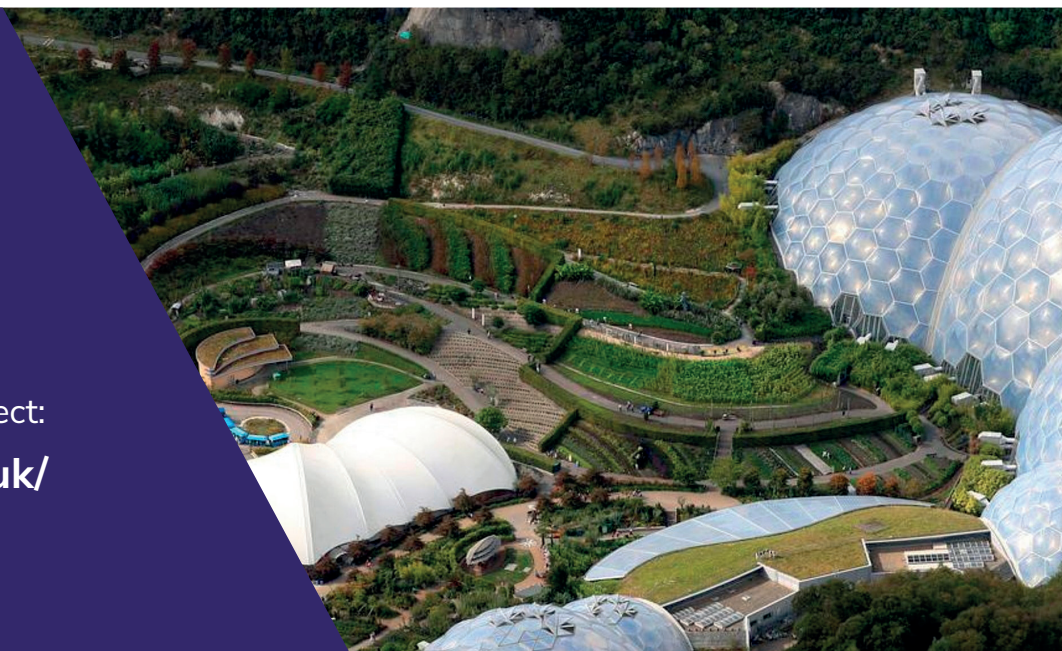
Climate change, sustainability and biodiversity are a big part of the world we live in. The industry is actively working to reduce waste, restore sites and develop solutions to these global challenges, including:

- Land restoration (e.g. quarries turned into nature reserves)
- Biodiversity net gain
- Reducing carbon emissions
- Supporting UK net zero targets



Find out more about the industry and what to expect:

**[minerals-matter.co.uk/
what-can-i-expect/](https://minerals-matter.co.uk/what-can-i-expect/)**



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