Learn how the mining and minerals industry plans to meet the increasing demand for minerals in order to support the transition to clean energy. Watch the Jobs of Tomorrow video series and complete the related activities to understand how innovation is changing the jobs required to meet the growing demand for minerals.

**NUMBER OF KEY MINERALS NEEDED FOR CLEAN TECHNOLOGIES**

- 19 minerals needed for EVs (frame, wiring/circuitry, batteries)
- 15 minerals needed for wind turbines (frame, wiring/circuitry, concrete)
- 17 minerals needed for solar panels (solar cells, semiconductor chips, steel frame, photovoltaic cells & batteries)

**SAMPLE OF ESSENTIAL MINERALS FOR CLEAN ENERGY**

- 3 Li Lithium
- 5 B Boron
- 6 C Carbon
- 13 Al Aluminum
- 23 V Vanadium
- 25 Mn Manganese
- 26 Fe Iron
- 27 Co Cobalt
- 28 Ni Nickel
- 29 Cu Copper
- 30 Zn Zinc
- 42 Mo Molybdenum
- 47 Ag Silver
- 51 Sb Antimony
- 57-71 La Lanthanides
- 78 Pt Platinum
- 79 Au Gold
- 82 Pb Lead

Try the MEC As Safe as a Mine activity in the 2023-2024 Earth Science Week Calendar!

MineralsEducationCoalition.org/ew
Shining the Spotlight on Modern Mining Careers

Explore the exciting, high-tech, and surprisingly green world of mining where the careers today are not what you expect.

Available now on Jobs of Tomorrow Season 1

• Community Relations: What’s Mine is Yours
• Mining 2.0: Progress and Innovation in the Industry
• Mining Data for Mining Innovation
• Urban Mining: Core to the Future
• Make Mine ESG
• The Elements of Green Energy

Not only does the mining industry have to meet society’s demands for minerals, it must also meet society’s Environmental, Social and Governance (ESG) expectations responsibly.

Learn about important engineering, environmental and tech jobs in the activities in this unit.