

Three Major Geoscience Issues of Relevance to Australia

Critical metals for a low-carbon high-tech economy...

Low-carbon high-tech economies depend on success in discovery and significant growth in supply of lithium, copper, rare earths, molybdenum, nickel, chromium, platinum and other metals. This will underpin a properly-staged transition of our energy sources, including the potential for hydrogen fuel generation.

There are also (growing) national security implications.

Increasing low-cost supply of these metals to the world will have greater global impact on carbon emissions than anything else Australia can do in the short term. This increase will require new deposits which can only be found by geoscientists applying the latest concepts and technologies.

There will be additional benefits to the Australian economy, especially in regional areas, if we can expand fabrication of new materials and products using our own resources.



Delivering the next generation of geoscientists...

A highly trained professional geoscience workforce is critical for Australia – from discovery and production of natural resources to action on major environmental issues.

Boom-and-bust mining cycles strongly affect university enrolments. Recent losses of geoscience programs, teaching and research staff threaten Australia's economic growth and sustainable management of our natural assets. This problem cannot be solved by the mining or environmental industries alone.

Governments can assist by linking future workforce planning to provision of training places.



The geosciences are vital for regional development...

The geosciences assist rural and regional development through mining and exploration activities, geotourism, local employment, indigenous support and infrastructure development.

The geosciences underpin sustainable urban and regional development. They provide critical information for assessing future development options and avoiding or mitigating environmental impacts.



The AGC is the peak council of geoscientists in Australia. It represents over 8,000 professionals in industry, government and academia in the fields of geology, geophysics, geochemistry, mineral and energy resources, environmental geoscience, hydrogeology and geological hazards. Member organisations are the **Geological Society of Australia**, the **Australian Institute of Geoscientists**, the **Australian Institute of Mining and Metallurgy**, the **Association of Applied Geochemists**, the **Petroleum Exploration Society of Australia**, the **Australian Society of Exploration Geophysicists**, the **International Association of Hydrogeologists** and the **Australian-New Zealand Geomorphology Group**.