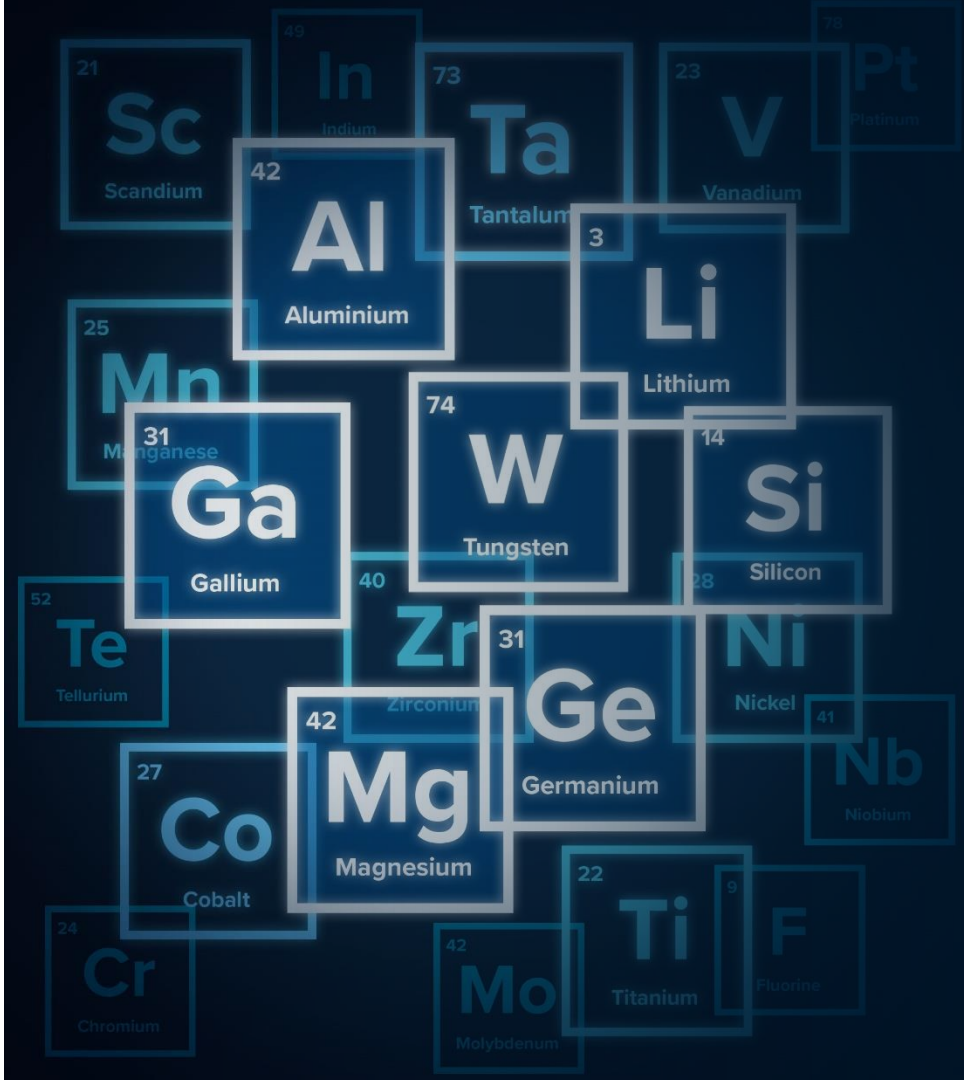
AUSTRALIAN
critical
minerals
RESEARCH & DEVELOPMENT HUB

Helping realise Australia's critical minerals potential through innovation and collaboration



CSIRO

ANSTO
Science. Ingenuity. Sustainability.

Australian Government
Geoscience Australia

Vision

Accelerate the commercial and strategic development of Australia's critical mineral resource endowment.

Support the clean energy transition and defence and technology industries.

Build diverse, secure and sustainable supply chains with international partners.

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Strategy

Building capabilities and downstream industries onshore.

De-risking commercial projects and helping attract international investment and partnerships.

Providing trusted advice to Government and leading Australia’s R&D community to the prioritise and coordinate research.

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The Hub

The Australian Critical Minerals R&D Hub brings together a strong partnership between Australia's three national science agencies:

Australian Nuclear Science and Technology Organisation (ANSTO)	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	Geoscience Australia

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Working together

Australia's three leading science agencies are united in solving technical challenges in the critical minerals value chains.

Producing materials needed by the world, using Australia's comparative advantage and high ESG standards.

Providing pre-competitive data on our geological potential, building on our processing know-how and connecting the critical minerals R&D ecosystem.

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Driving innovation

CAPABILITY

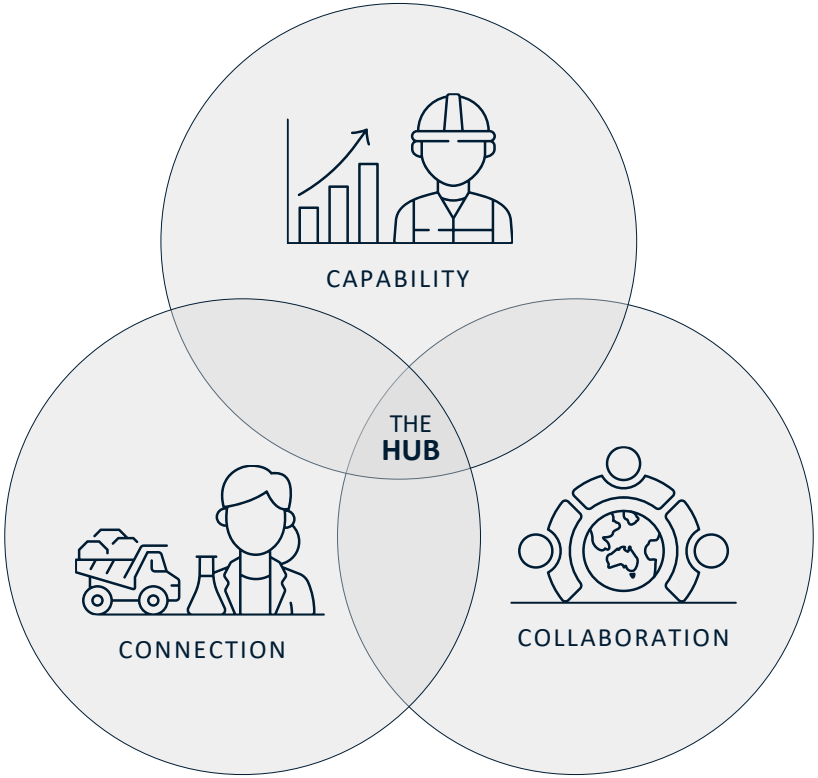
Scaling-up and **commercialising** critical minerals research and development.

CONNECTION

Connecting the critical minerals R&D ecosystem, linking industry to R&D solutions, informing policy.

COLLABORATION

Supporting strategic international critical minerals **collaboration.**



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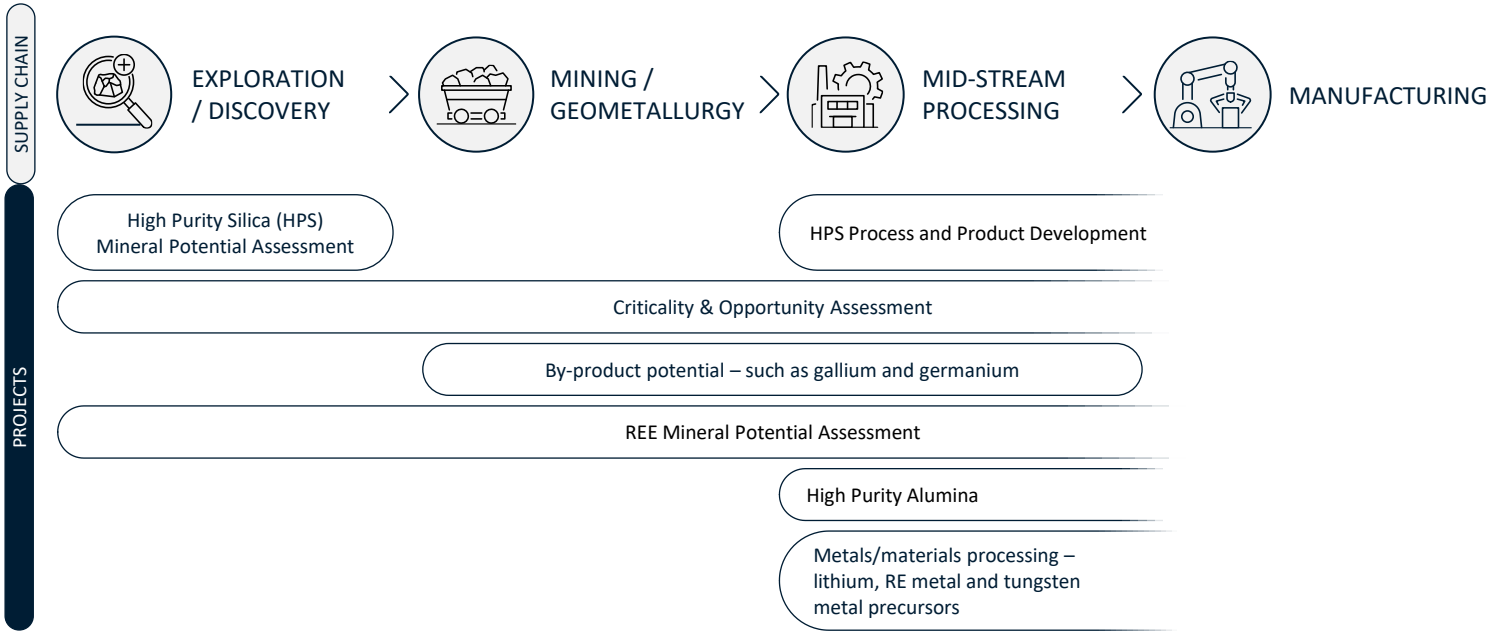
CAPABILITY

CONNECTION

COLLABORATION

Scaling up and commercialising R&D

The Hub is conducting pre-commercial, publicly-funded research projects along the value chain to grow our industry and deliver technical breakthroughs that will diversify global supply chains of strategic significance.



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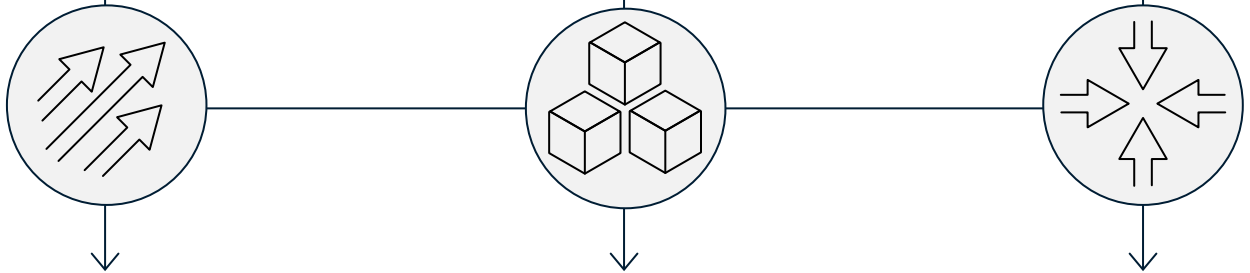
Connecting the critical minerals ecosystem

The Hub is delivering science solutions across the critical minerals value chain by coordinating expertise, prioritising R&D challenges and facilitating crucial connections.



Leading national R&D priority setting across the ecosystem

Building a database of Australian critical minerals R&D and expertise

Connecting the research sector, government and industry

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CAPABILITY

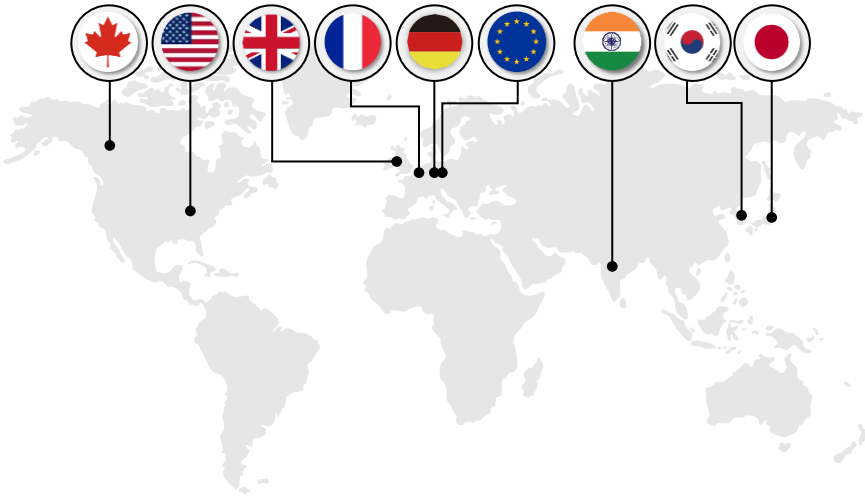
CONNECTION

COLLABORATION

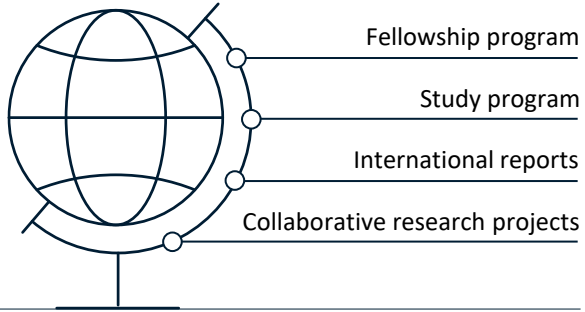
Supporting strategic international collaboration

The Hub is working with like-minded partners to integrate the critical minerals research ecosystem and identify R&D opportunities that will accelerate solutions to supply chain problems.

Established international partnerships



International Programs



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Australia's competitive advantage

Australia has the capability to supply responsibly sourced minerals and materials needed to diversify global supply chains.

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Australia has a rich mineral and renewable resource endowment

477 deposits with a critical mineral resource

62 operating mines

32 mines under development

#1 global producer of lithium with the potential to be in the top five producer of vanadium and gallium

Australia's competitive advantage

Australia has the capability to supply responsibly sourced minerals and materials needed to diversify global supply chains.

Australia has a strong industrial base and demonstrated high ESG standards

- A commitment to Net Zero
- Strong, mature state and federal environmental laws
- Circular economy and recycling
- Comprehensive Professional code of practice (JORC)

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Australia's competitive advantage

Australia has the capability to supply responsibly sourced minerals and materials needed to diversify global supply chains.

Step-change expansion to mid-stream processing capability

Opportunities to unlock competitive and sustainable 'value-add' products

Enable Australian export of responsibly produced materials

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Australia's competitive advantage

Australia has the capability to supply responsibly sourced minerals and materials needed to diversify global supply chains.

Australia is a stable jurisdiction with robust institutional structures and a strong regulatory framework.

Corruption Perceptions Index ranks Australia at **14th place** out of 180 countries

Australian mining equipment, technology and services at the forefront of developing cutting-edge technology

13th largest economy in the world

Australia has **18** free trade agreements

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Priorities for Australian R&D in critical minerals

PRIORITIES	**Support** commercial deployment of mature technologies
	Pilot and scale up Australian technologies
	Accelerate emerging technology and grow Australian IP
	Establish new capability in emerging technologies
STRATEGIES	**Develop** continuous and step-change improvements on costs and sustainability
	Maximise return on RD&D investment through cross-cutting capabilities and shared infrastructure
	Integrate research from adjacent fields to support innovation and decision making

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Taken from the *CSIRO (2024) From minerals to materials: Assessment of Australia's critical mineral mid-stream processing capabilities. CSIRO, Canberra*, p 6 and p 20.

Engage with us

The Hub is a **unique** opportunity to build **diverse, secure** and **sustainable** value chains that facilitate the clean energy transition and promote shared strategic solutions.

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Thank you

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