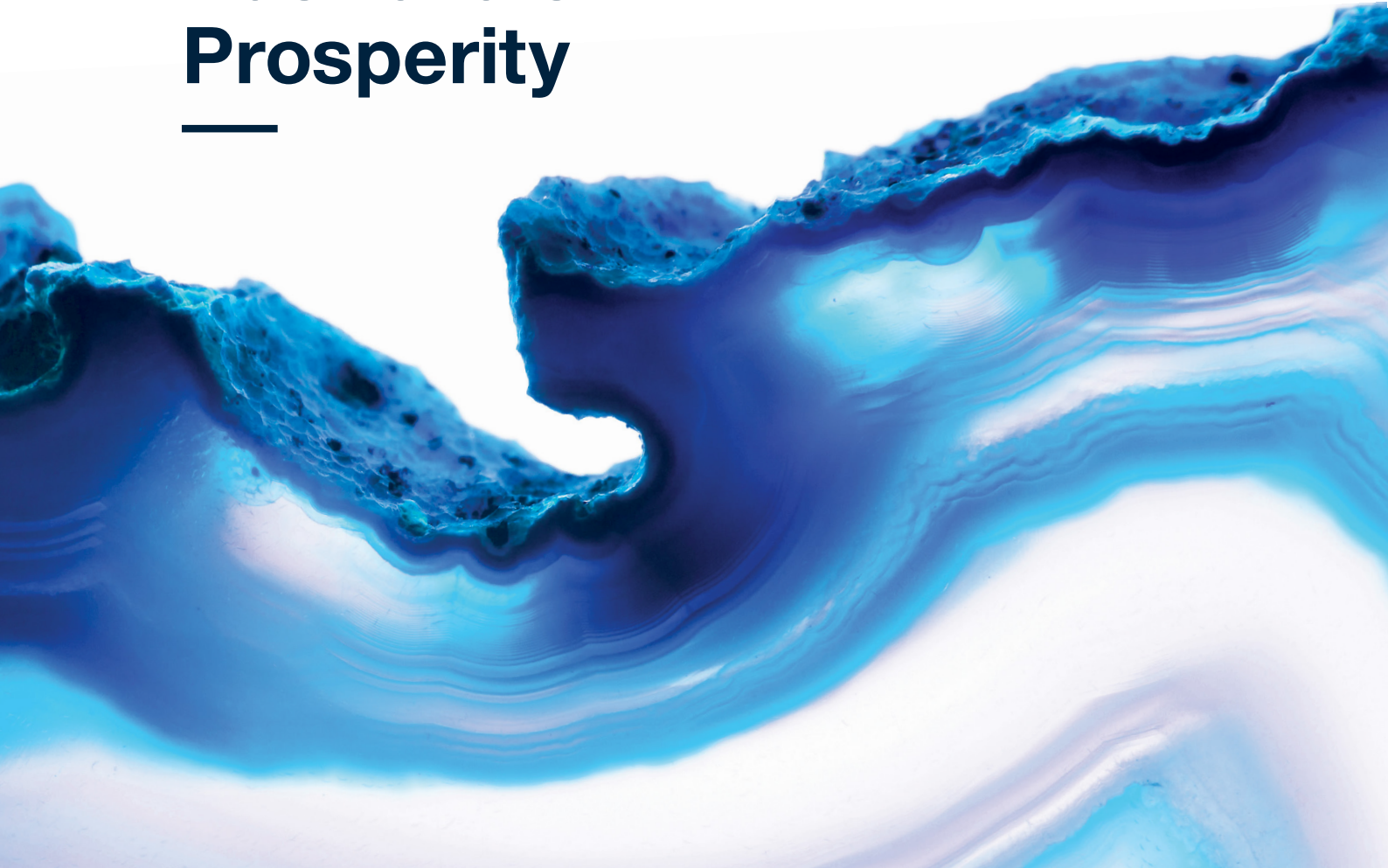




Australian Government

Geoscience Australia

Resourcing Australia's Prosperity



Resourcing Australia's Prosperity

is a landmark initiative that will secure Australia's future as a global supplier of the resources necessary for the net zero transition.

An ambitious \$3.4 billion, 35-year (2024-2059) investment in precompetitive geoscience by the Australian Government, Resourcing Australia's Prosperity will play a key role in unlocking new opportunities to support a thriving and resilient national economy and a Future Made in Australia.

This initiative focuses on mapping our potential for critical minerals and strategic materials, hydrogen and carbon dioxide storage, and offshore renewable energy. It will also map the groundwater systems that support the development of these resources, contribute to our water and food security, and bolster our climate resilience.

Resourcing Australia's Prosperity will drive economic growth and create jobs in the global shift to a net zero economy. By partnering with government and other research partners, this initiative also lays the groundwork for a prosperous, competitive and sustainable future.

Resourcing Australia's Prosperity will ensure our resources sector continues to underpin Australia's national economy. It builds on a resources sector that, in 2023, directly contributed:

13.4%

of GDP

\$466 billion

in exports

300,000

Australian jobs

Securing Australia's future through precompetitive geoscience

Government precompetitive geoscience supports resource development, coming before private sector exploration and investment.

Resourcing Australia's Prosperity will accelerate the discovery and responsible development of Australia's mineral, energy and groundwater resources, transforming the nation by:

Supporting the transition to net zero

- Growing a prospectus of investment opportunities to secure the resources needed for clean energy technologies.
- Locating viable sites for carbon dioxide and hydrogen storage underground, and for offshore renewable energy production.
- Assessing opportunities for resource development and decarbonisation of the resources sector.

Enabling a strong resources sector

- Identifying resource development opportunities in the short and medium term.
- Reducing exploration risk and accelerating new discoveries to secure a pipeline of resource projects for the long term.
- Enhancing responsible management of natural resources.
- Supporting project approval processes by unlocking environmental and geological information that supports planning and regulation.

Empowering First Nations peoples and local communities

- Advancing co-designed tools, partnerships and work programs alongside First Nations peoples to support responsible management of Land and Sea Country.
- Informing opportunities for communities and First Nations economic self-determination and decisions affecting them.
- Building First Nations expertise in data collection and geoscience to support decisions about land and water resources.

Supporting continued innovation

- Revealing potential new sources of commodities used in high tech and strategic technologies.
- Facilitating the adoption of new and innovative technologies through public geoscience.
- Promoting growth in emerging technologies used in mining, natural resources management and related applications.

Resourcing Australia's Prosperity

Over the next decade (2024–2034), Resourcing Australia's Prosperity will be delivered through 4 interrelated components:



1 Australia-wide geoscience provides the building blocks to better understand what lies on and beneath the land surface and seabed. By improving the quality and completeness of this information, we can realise Australia's resource potential and accelerate the exploration, development and responsible management of our natural resources.

Compilation

Collate, curate and interpret existing government, industry and academic geoscience data to improve accessibility and maximise its use.

MAJOR RELEASES

- 2029 – national seabed map series
- 2030 – national compilation of industry geochemistry

Collection

Collect new geophysical, geological and geochemical data to increase understanding of our continent.

MAJOR RELEASES

3 complete national geophysical datasets:

- 2027 – passive seismic
- 2032 – improved Australian Fundamental Gravity Network
- 2034 – airborne electromagnetics

Interpretive products

Combine and analyse geoscience data to model and interpret Australia's geology.

MAJOR RELEASES

- 2025 – national 3D stratigraphic model of Australian sedimentary basins
- 2031 – national 3D geology map of Australia

Innovation

Develop new data systems, standards and technology to ensure products provide future value.



2 National resource assessments will underpin Australia's resources future and support effective decision-making. Assessments will evaluate the potential for critical minerals, strategic materials, groundwater, natural hydrogen, geological storage of hydrogen and carbon dioxide, and suitability for offshore renewable energy infrastructure.

Minerals

Develop a national prospectus of Australia's geological and economic potential for the responsible supply of critical minerals and strategic materials. This includes underexplored regions, existing deposits and re-mining opportunities.

MAJOR RELEASE

- 2026–2034 – rare earth elements, copper, cobalt and priority battery minerals assessments

Geological storage

Identify and map onshore and offshore opportunities for the underground storage of hydrogen and carbon dioxide.

MAJOR RELEASES

- 2027 – national hydrogen hub storage assessment
- 2028 – national carbon dioxide storage resource atlas

Offshore renewable energy

Map the stability and suitability of Australia's seabed for renewable energy.

MAJOR RELEASE

- 2034 – national seabed stability map

Groundwater

Deliver assessments of Australia's groundwater systems to support responsible groundwater use and management.

MAJOR RELEASE

- 2034 – national 3D groundwater map



3 Deep dives are detailed, multi-commodity assessments that aim to enhance our understanding of resource prospectivity in selected onshore regions. By collecting and interpreting more data, and at finer scales, we will reduce exploration and investment risks in areas with unrealised resource potential.

Exact locations and extents may change through consultation and research. Geoscience Australia consults with land and sea connected peoples before undertaking new activities and obtains permission from land managers for access.

Regional geoscience

Collect and analyse regional-scale data on the geology and resource potential of the region.

MAJOR MILESTONES

- 2027 – complete deep dive 1 and commence deep dive 3
- 2029 – complete deep dive 2 and commence deep dive 4
- 2032 – complete deep dive 3 and commence deep dive 5
- 2034 – complete deep dive 4 and commence deep dive 6

Tech pull-through

Pilot new technologies to drive geoscience innovation.





4 Delivery, awareness raising and engagement supports stakeholders to realise the benefits of precompetitive geoscience data and information. We will foster collaborative relationships and deliver data, information and tools for improved decision-making by government, industry and communities.

Outreach

Raise awareness of precompetitive geoscience through communication and outreach, building trust and understanding with communities.

First Nations partnerships

Build strong, lasting relationships with First Nations peoples to create collaborative opportunities and support their self-determination.

MAJOR MILESTONE

- 2025 – establish First Nations advisory group

Informing decisions

Engage with government, industry, communities and academia to increase the use of precompetitive geoscience.

Data delivery

Deliver trusted data, information, decision-support tools and capabilities for data-driven decision-making.

MAJOR DELIVERY

- 2030 – second generation geoscience data delivery capability

Resourcing Australia's Prosperity

will establish a platform for delivering a strong and resilient resources sector that will benefit all Australians, now and into the future.



Geoscience Australia will continue to deliver precompetitive geoscience data, analysis and tools.

By leveraging our existing strengths and exploring new horizons:



- government will advance the Critical Minerals, National Battery, Hydrogen and Gas strategies and the Nature Positive Plan
- industry and communities will be positioned to embrace clean energy solutions for a net zero economy
- all Australians will be able to more easily find, access and reuse digital geoscience products and services.



Enabling responsible resource exploration and development through Resourcing Australia's Prosperity will continue to create local jobs, contribute to strong economic growth and secure a Future Made in Australia.



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