The U.S.-Australia Strategic Innovation Alliance

Mining in Australia Factsheet

Overview and Economic Contribution

Mining continues to be a foundational pillar of Australia's economy. As of 2025, the sector contributes approximately 12.1 percent of Australia's GDP, with total export revenues from mining and resources exceeding $300 billion, up from $270 billion in 2023.[1] The industry provides over 270,000 direct jobs and supports hundreds of thousands more indirectly through construction, services, and logistics.[2] Australia remains the world's leading exporter of iron ore, lithium, and a top producer of gold, bauxite, and coal.

Export and Global Positioning

Key mineral exports in 2025 include:

- **Iron ore**: $91 billion in exports, primarily to China, Japan, and South Korea.
- **Lithium**: Surging demand for EV batteries has pushed lithium exports above $14 billion, a 30 percent year-over-year increase.[3]
- **Coal** (thermal and metallurgical): Exports generated $49 billion, though long-term demand remains uncertain due to global decarbonization.[4]
- **Critical minerals**: The government is prioritizing rare earths, cobalt, nickel, and vanadium, with new federal funding allocated for processing and refining.[5]

Regional Distribution and Investment

Major mining operations are concentrated in Western Australia (iron ore and lithium), Queensland (coal and bauxite), and the Northern Territory (manganese and rare earths). However, 2025 saw increased investment in mineral exploration and mining services in:

- **Victoria**: Focus on gold and battery minerals.
- **New South Wales**: Development of underground coal mining automation.

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[1] Australian Bureau of Statistics, National Accounts: Mining Sector GDP, Q1 2025.
[2] Australian Department of Industry, Resources and Energy Quarterly, March 2025.
[3] Austrade, Lithium Market Outlook, 2025.
[4] International Energy Agency, Coal 2025 Forecast, April 2025.
[5] Critical Minerals Office, Investment Strategy Update, 2025.

- **Tasmania**: Expansion in tin and tungsten projects.

Private and public investment in mining reached $44.5 billion in 2024, including $2.5 billion for decarbonization and digital transformation technologies.[6]

Innovation and Sustainability

Australia's mining sector is undergoing rapid modernization:

- **Autonomous mining**: Companies like Rio Tinto and BHP are deploying fully autonomous haulage systems in Pilbara operations.
- **Decarbonization**: The Minerals Council of Australia reports that 78 percent of member companies have adopted net-zero targets, with new projects in green hydrogen and solar-powered mining.[7]
- **AI and robotics**: ACSIRO-led initiative is using AI for ore body discovery and predictive maintenance, cutting costs by up to 15 percent.[8]

Government-backed innovation hubs, including the Mining Equipment, Technology and Services (METS) Growth Centre, are facilitating partnerships between universities and industry.

Workforce and Skills

The mining workforce is aging and faces acute skills shortages, particularly in regional and remote areas. As of early 2025:

- There are more than 11,000 unfilled roles in the sector.
- Women make up only 18 percent of the mining workforce, prompting expanded diversity and training programs.[9]
- The Mining Skills Organization Pilot is training new workers in data analytics, drone operation, and environmental monitoring.

Environmental and Social Governance (ESG)

Environmental regulation has tightened, especially around water use, emissions, and land

[6] Department of Treasury, Private Capital Expenditure by Industry, 2024.
[7] Minerals Council of Australia, Climate Transition Report, 2025.
[8] CSIRO, AI in Exploration: Project Impact Report, 2025.
[9] Mining Skills Australia, Workforce Dashboard, 2025.

rehabilitation. Indigenous land use agreements are under increased scrutiny following the Juukan Gorge Inquiry reforms, prompting mining firms to expand community consultation and long-term benefit sharing.[10]

[10] National Indigenous Australians Agency, Post-Juukan Reform Tracker, 2024.