



Innovate
UK

Quantum Technology in Australia: Market Insights



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Quantum technology in Australia: Stakeholders met

National
- CSIRO

Industry

- Trade & Investment Queensland
- Diraq
- Q_CTRL
- Silanna

Academia

- The University of Queensland
- Griffith University
- Queensland University of Technology
- The University of Southern Queensland

Industry

- QuantX Labs

Academia

- The University of Adelaide

Industry

- Trade & Investment Victoria
- Breakthrough Victoria
- Infleqtion
- Invest Victoria

Academia

- The University of Melbourne
- RMIT University

Industry

- Sydney Quantum Academy
- Silicon Quantum Computing (SQC)

Academia

- Macquarie Centre for Quantum Engineering (MQCQE)
- The University of Technology Sydney
- Centre for Quantum Software and Information (QSI)
- Centre of Excellence for Quantum Computation and Communication Technology (CQC2T)

Quantum technology in Australia: Global & domestic market

- Vibrant startup scene with world class institutions
- Relatively small, but growing

Focus areas:

- Defence & PNT
- Environmental monitoring & resource exploration
- Life sciences
- Quantum computing & communication

Wider use cases

- Transport
- Life mineral exploration
- Finance and global banking security



AU\$6 billion

Estimated Australian market for quantum technologies by 2045^a



US\$10 billion

Global market for quantum technologies by 2030^b



19,400

Australian jobs estimated to be created in the quantum technologies sector by 2045^a



15%

UK ambition for share of global quantum technologies market by 2033, current share is 9%^c



5th

The UK is Australia's 5th most frequent partner for bilateral agreements^d



£2.5 billion

UK government funding for quantum technologies between 2024 - 2034^e

Quantum technology in Australia: Innovation support

Roadmaps

- Australian National Quantum Strategy (DISR)
- Quantum Technology Roadmap (CSIRO)

Skills

- Sydney Quantum Academy
- Centre of Excellence for Quantum Computation and Communication Technology (CQC2T)
- National Industry PhD Program

Funding

- Australian Research Council (ARC)
- Australia's Economic Accelerator - \$1.6 billion grant programme
- Trailblazer Universities Program - \$362.5 2021 - 2026

Facilities

- Australian National Fabrication Facility (ANFF)



Quantum technology in Australia:

UK – Australia collaboration

- AUKUS Quantum Arrangement (AQuA)
- Quantum computing, artificial intelligence, and cybersecurity

Wider collaboration

- 565 agreements between Australian and UK institutions
- UK is Australia's 5th most frequent partner
- UK is Australia's third academic collaborator by co-authored research outputs

