

## Australia sets out A\$1bn national quantum strategy

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Cashing in: Australia's quantum industry could be worth A\$4.6bn by the end of the decade (courtesy: iStock/Quardia)

Australia has launched [its first national quantum strategy](#) with the aim of becoming a global player in quantum technologies by the end of the decade. Released by the Department of Industry, Science and Resources, [the A\\$1bn initiative](#) aims to boost Australia's economy, protect the country's national security and prevent a brain drain of top people heading abroad.

The strategy has five central "themes" to boost quantum technologies, including investing in research, securing access to infrastructure, and growing a skilled workforce. It also focuses on three main categories of quantum technology, namely computing, communication and sensing. Quantum sensors could, for example, be useful by Australia's mining industry to locate mineral deposits.

The quantum strategy also aims to ensure the country does not lose out in the talent race. Australia already has a thriving quantum community, including [four nation-wide quantum-focused research centres of excellence](#). Companies such as Microsoft have also poured millions of dollars into quantum engineering research at the University of Sydney, while several quantum startups have been founded, the oldest of which is cybersecurity firm [QuintessenceLabs](#).

Australia now joins other leaders in quantum technology, including China, [the EU](#), [the UK](#) and [the US](#), in having its own formal quantum strategy. Australia's Commonwealth Scientific and Industrial Research Organisation projects that the country's quantum industry could be worth A\$4.6bn by the end of the decade and may employ as many people by 2045 as the oil and gas sector does today.

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“We are in the top handful of countries embarking on a quantum ambition,” says Australia’s chief scientist, the physicist [Cathy Foley](#). “But we have to act now, as there is intense global attention on the promise of quantum.” Foley believes the strategy will let Australia “grow a thriving deep-tech industry, built out of co-ordinated, long-term government investment and a critical mass of world-class Australian-trained quantum specialists”.

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