

QUANTUM

Issue

What is the Government doing to put Australia at the forefront of quantum technologies?

Key Talking Points

- Australia has been a global pioneer in quantum research for decades.
- We are committed to translating that advantage into a thriving quantum industry that boosts our economic competitiveness, helps solve our biggest national challenges and strengthens our sovereign capability.
- Quantum has the potential to drive step changes across industries, from finance to logistics, healthcare, pharmaceuticals, resources and defence. This will boost productivity and improve the lives of Australians.
- Conservative estimates from the CSIRO show that quantum technologies could generate nearly \$6 billion in revenue and over 19,000 jobs in Australia by 2045.
- According to Boston Consulting Group, investing in the world's first utility-scale fault-tolerant quantum computer could lead to even greater benefits: up to an additional \$48 billion in GDP and 240,000 new jobs in Australia by 2040.
- The Government launched the National Quantum Strategy in May 2023. It outlines 13 actions the government will take to grow the Australian quantum ecosystem over seven years.
- Our vision is for Australia to be a global technology leader by 2030 and ensure that investment and leadership in quantum technologies contribute to a prosperous, fair and inclusive Australia.

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- Since launching the strategy, our quantum sector has gone from strength to strength, with investments by both private and state-backed funds recognising Australia's significant breadth and strength of quantum talent.
 - Silicon Quantum Computing closed a \$50 million capital raise.
 - Software startup Q-CTRL raised around \$75 million after IBM announced a breakthrough use of Q-CTRL's quantum computer infrastructure software for error suppression and performance management.
 - Diraq closed off a capital raise, bringing total funding of its technology to US\$120 million.
 - Nomad Atomics led a pre-Series A funding round, raising \$10 million in July 2023.
- Australia has strength in other quantum technologies, with Quintessence Labs providing quantum-based cryptographic solutions to 18 countries and QuantX Labs developing precision quantum sensors to enhance communication, navigation, surveillance and defence systems .
- In April 2024, the Government announced a funding package of approximately \$470 million, with matched investment from the Queensland Government, to support PsiQuantum to build and operate its world-first utility-scale fault-tolerant quantum computer in Australia.
- This investment shows the Government is serious about delivering a world-leading quantum ecosystem and marks a partnership that will deliver hundreds of direct jobs and billions of dollars in direct investment in Australia.

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- As part of this investment, PsiQuantum will:
 - Establish its Asia-Pacific headquarters in Brisbane, along with facilities to build and operate its first utility-scale fault tolerant quantum computer.
 - Deliver multiple generations of quantum computing capability and maintain the product site as a flagship global facility over an expected 20-year economic life.
 - Actively strengthen the local quantum industry by creating opportunities in manufacturing.
 - Build opportunities for partnerships and collaboration with local universities, research institutions and government.
 - Grow the domestic ecosystem, including through funding education programs and creating hundreds of new high-skilled jobs.
- The Australian Government provided \$60 million in the 2023-24 Budget to grow the quantum sector, including:
 - The \$40.2 million Critical Technologies Challenge Program (CTCP), which will drive greater awareness and uptake of quantum technologies in Australia by putting quantum technologies to work solving national challenges.
 - \$18.4 million awarded to the University of Sydney in April 2024 to establish a new national centre, ‘Quantum Australia’, to catalyse industry growth, support collaborative research and strengthen Australia’s position as a global quantum leader.
- We have also commenced work on a national audit of quantum infrastructure, monitoring quantum supply chains and a report on quantum workforce needs.

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If asked: Why wasn't there a public Expression of Interest process or procurement to choose a company to deliver the quantum computer capability?

- The Government decided to test the market to assess capability and interest to deliver a commercial-scale fault tolerant quantum computer in Australia, ideally by 2030.
- Consistent with the obligations in the *Public Governance, Performance and Accountability Act 2013* (Cth) in relation to the proper use of public monies, my department undertook a targeted Expression of Interest (EOI) in August 2023 to evaluate alternative options and determine value for money.
- The approach was informed by the guidance and principles in the Commonwealth Investment Framework, along with expert technical and probity advice. It was carefully designed to not favour a particular technology type.
- Twenty-one companies were invited to respond to the EOI process—the department took a broad and inclusive approach, based on expert advice.
- The EOI was one of a range of inputs to the Government's decision to fund PsiQuantum, along with extensive commercial, legal and technical due diligence.

If asked: Questions relating to the commercial conditions of the PsiQuantum transaction

- Details of the transaction are commercial-in-confidence.
- Financing is being provided through EFA, which will disclose details in accordance with their normal reporting requirements and in a manner that respects the commercial confidentiality requirements of the company.

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Background

- The CTCP round one feasibility grants are expected to open in May 2024, with successful technology demonstrator projects commencing in late 2025.
 - Initial consultation for the CTCP took place in late August and early September 2023, with information sessions attended by 169 stakeholders.
- The Australian Centre for Quantum Growth (ACQG) grant to the University of Sydney was announced on 27 April 2024.
 - Applications for the ACQG grant opened 4 December 2023 and closed 24 January 2024.
 - Consultations for the ACQG took place in July 2023, attended by 119 stakeholders.
- In addition to the 2023-24 Budget measures, the Australian Government has funded a range of programs and initiatives that directly and indirectly support the growth of the quantum industry.
- CSIRO was awarded \$3.6 million over the four years from 2022-23, to fund up to 20 quantum PhDs as part of the Next Generation Quantum Graduates Program (NCQG).
 - University course provider applications closed 9 October 2023.
 - Successful universities have now commenced student recruitment activities.
- \$1 million National Quantum Collaboration Initiative funding was awarded to Sydney Quantum Academy (SQA) to help grow Australia's quantum industry capability through education and research.

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- Around the world, countries are accelerating investments in leading quantum technologies.
- In April 2024, the Government announced a funding package of approximately \$470 million, with matched investment from the Queensland Government, to support PsiQuantum, co-founded by Australian quantum leaders Professor Jeremy O'Brien and Professor Terry Rudolph, to build and operate its world-first utility-scale fault-tolerant quantum computer in Australia, and deliver a range of industry and research partnerships.
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If asked: Questions relating to the movement of departmental staff

- Staffing decisions are a matter for the department.

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- The approach was designed to understand alternative options and inform assessments of value for money, consistent with the obligations in the *Public Governance, Performance and Accountability Act 2013* (Cth) in relation to the proper use of public monies
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 - \$19.8 million to catalyse industry growth, support collaborative research and strengthen Australia's position as a global quantum leader under the Australian Centre for Quantum Growth (ACQG) program. The University of Sydney has been awarded \$18.4 million to establish the Centre, which they have named *Quantum Australia*.
- We have also commenced work on a national audit of quantum infrastructure, monitoring quantum supply chains and a report on quantum workforce needs.

- We are also working to strengthen Australia’s international partnerships in quantum. In July 2024, Australian Government representatives participated in a high-level meeting hosted by the United States, together with representatives from Denmark, Finland, France, Germany, Japan, the Republic of Korea and the United Kingdom.
 - The group discussed developing coordinated approaches to quantum information science and technology, to promote resilient and reliable supply chains, research and development collaboration, and a quantum future in line with shared interests and values.

If asked: Why wasn’t there a public Expression of Interest process or procurement to choose a company to deliver the quantum computer capability?

- The Government ran an Expression of Interest (EOI) process in August 2023 to understand the capability and interest in delivering a commercial-scale fault tolerant quantum computer in Australia by 2030, and delivering a range of related benefits to strengthen Australia’s quantum sector and contribute to the national interest.
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If asked: Questions relating to PsiQuantum and the Chicago Quantum Proving Ground

- We welcome investment by the United States Government and State of Illinois to develop a Quantum Proving Ground, with the selection of PsiQuantum as anchor tenant reflecting the strength of Australia's investment in the company.
- This opens up further avenues for US-Australia collaboration on quantum research and development, in ways that benefit our economic and national security.

If asked: Questions relating to the request from the Hon Paul Fletcher MP that the Auditor-General conduct an investigation into the investment in PsiQuantum

- We are aware of the correspondence from the Hon Paul Fletcher MP dated 30 July 2024, requesting that the Auditor-General conduct an investigation into the investment in PsiQuantum announced by the Australian and Queensland governments on 30 April 2024.
- The request will be considered by the acting Auditor-General in line with the ANAO's practices for such requests.

If asked: Questions relating to Microsoft's exit from quantum computing research in Australia, and the offer to relocate the Sydney University research team to US headquarters.

- We are pleased that the Sydney University team has decided to remain in Australia. This commitment shows that Australia has immense quantum potential and retaining talent like this will ensure we continue to become a quantum leader.

If asked: Questions relating to changes to the text of the National Quantum Strategy during the drafting process

- The department made numerous changes to the text of the Strategy during 2023 to respond to feedback provided through normal Government processes.

If asked: Questions relating to Defence Export Controls

- The Department of Defence has been engaging with the Australian quantum industry to ensure they are aware of amendments to the Defence Export Trade Controls Act and Regulations.
- The department has been advocating for quantum industry interests throughout the process and advising the Department of Defence on key stakeholders to consult with.
- Questions on the Amendments and the consultation process should be directed to the Department of Defence.

Background

- The Defence Trade Controls Amendment Commencement Proclamation 2024 was signed by the Governor General at the 18 July Executive Council meeting and included the Defence Trade Controls Legislation Amendment Regulations 2024.

- The DTC Amendment Act and DTL Amendment Regulations will commence on 1 September 2024.
- The Department of Defence is in the process of hosting information sessions to communicate changes to the DTC Act and Regulations.
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- My department is also working to strengthen Australia’s international partnerships in quantum. In July 2024, Australian Government representatives participated in a high-level meeting hosted by the United States, together with representatives from Denmark, Finland, France, Germany, Japan, the Republic of Korea and the United Kingdom.
 - The group discussed developing coordinated approaches to quantum information science and technology, to promote resilient and reliable supply chains, research and development collaboration, and a quantum future in line with shared interests and values.

If asked: Why wasn’t there a public Expression of Interest process or procurement to choose a company to deliver the quantum computer capability?

- The Government ran an Expression of Interest (EOI) process in August 2023 to understand the capability and interest in delivering a commercial-scale fault tolerant quantum computer in Australia by 2030, and delivering a range of related benefits to strengthen Australia’s quantum sector and contribute to the national interest.
- The approach was designed to understand alternative options and inform assessments of value for money, consistent with the obligations in the *Public Governance, Performance and Accountability Act 2013* (Cth) in relation to the proper use of public monies.
- The approach was informed by the guidance and principles in the Commonwealth Investment Framework, along with expert technical and probity advice. It was carefully designed to not favour a particular technology type.
- Twenty-one companies were invited to respond to the EOI process—the department took a broad and inclusive approach, based on expert advice.

- The EOI was one of a range of inputs to the Government's decision to fund PsiQuantum, along with extensive commercial, legal and technical due diligence.

If asked: Questions relating to the commercial conditions of the PsiQuantum transaction

- Details of the transaction are commercial-in-confidence.
- Financing is being provided through EFA, which will disclose details in accordance with their normal reporting requirements and in a manner that respects the commercial confidentiality requirements of the company.

If asked: Questions relating to PsiQuantum and the Chicago Quantum Proving Ground

- I welcome investment by the United States Government and State of Illinois to develop a Quantum Proving Ground, with the selection of PsiQuantum as anchor tenant reflecting the strength of Australia's investment in the company.
- This opens up further avenues for US-Australia collaboration on quantum research and development, in ways that benefit our economic and national security.

If asked: Questions relating to the request from the Hon Paul Fletcher MP that the Auditor-General conduct an investigation into the investment in PsiQuantum

- I am aware of the correspondence from the Hon Paul Fletcher MP dated 30 July 2024, requesting that the Auditor-General conduct an investigation into the investment in PsiQuantum announced by the Australian and Queensland governments on 30 April 2024.
- I understand that the request will be considered by the acting Auditor-General in line with the ANAO's practices for such requests.

If asked: Questions relating to Microsoft's exit from quantum computing research in Australia, and the offer to relocate the Sydney University research team to US headquarters.

- I am pleased that the Sydney University team has decided to remain in Australia. This commitment shows that Australia has immense quantum potential and retaining talent like this will ensure we continue to become a quantum leader.

If asked: Questions relating to changes to the text of the National Quantum Strategy during the drafting process

- The department made numerous changes to the text of the Strategy during 2023 to respond to feedback provided through normal Government processes.

If asked: Questions relating to Defence Export Controls

- The Department of Defence has been engaging with the Australian quantum industry to ensure they are aware of amendments to the Defence Export Trade Controls Act and Regulations.
- The department has been advocating for quantum industry interests throughout the process and advising the Department of Defence on key stakeholders to consult with.
- Questions on the Amendments and the consultation process should be directed to the Department of Defence.

Background

- The Defence Trade Controls Amendment Commencement Proclamation 2024 was signed by the Governor General at the 18 July Executive Council meeting and included the Defence Trade Controls Legislation Amendment Regulations 2024.
 - The DTC Amendment Act and DTL Amendment Regulations will commence on 1 September 2024.
- The Department of Defence is in the process of hosting information sessions to communicate changes to the DTC Act and Regulations.
- Applications for the CTCP round one feasibility grants opened on 22 May 2024, and closed on 2 July 2024. Successful technology demonstrator projects are expected to commence in late 2025.
 - Initial consultation for the CTCP took place in late August and early September 2023, with information sessions attended by 169 stakeholders.
- The ACQG grant to the University of Sydney was announced on 27 April 2024.
 - Applications for the ACQG grant opened 4 December 2023 and closed 24 January 2024.
 - Consultations for the ACQG took place in July 2023, attended by 119 stakeholders.
- In addition to the 2023-24 Budget measures, the Australian Government has funded a range of programs and initiatives that directly and indirectly support the growth of the quantum industry.
- CSIRO was awarded \$3.6 million over the four years from 2022-23, to fund up to 20 quantum PhDs as part of the Next Generation Quantum Graduates Program.

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- University course provider applications closed 9 October 2023.
- Successful universities have now commenced student recruitment activities.
- \$1 million National Quantum Collaboration Initiative funding was awarded to Sydney Quantum Academy to help grow Australia's quantum industry capability through education and research.

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QUANTUM**Issue**

What is the Government doing to put Australia at the forefront of quantum technologies?

Key Talking Points

- Australia has been a global pioneer in quantum research for decades.
- The Government is committed to translating that advantage into a thriving quantum industry that boosts our economic competitiveness, helps solve our biggest national challenges and strengthens our sovereign capability.
- Quantum has the potential to drive step changes across industries, from finance to logistics, healthcare, pharmaceuticals, resources and defence. This will boost productivity and improve the lives of Australians.
- Conservative estimates from the CSIRO show that quantum technologies could generate nearly \$6 billion in revenue and over 19,000 jobs in Australia by 2045.
- The Government launched the National Quantum Strategy in May 2023. It outlines 13 actions the government will take to grow the Australian quantum ecosystem over seven years.
- Our vision is for Australia to be a global technology leader by 2030 and ensure that investment and leadership in quantum technologies contribute to a prosperous, fair and inclusive Australia.

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- Since launching the strategy, our quantum sector has gone from strength to strength, with investments by both private and state-backed funds recognising Australia's significant breadth and strength of quantum talent.
 - Silicon Quantum Computing closed a \$50 million capital raise.
 - Software startup Q-CTRL raised around US\$54 million after IBM announced a breakthrough use of Q-CTRL's quantum computer infrastructure software for error suppression and performance management.
 - Diraq closed off a capital raise, bringing total funding of its technology to US\$122 million.
 - Nomad Atomics led a pre-Series A funding round, raising \$10 million in July 2023.
- Australia has strength in other quantum technologies, with Quintessence Labs providing quantum-based cryptographic solutions to 18 countries and QuantX Labs developing precision quantum sensors to enhance communication, navigation, surveillance and defence systems.
- Around the world, countries are accelerating investments in leading quantum technologies.
- In April 2024, the Government announced a \$466.4 million financing package of equity and loans provided by Export Finance Australia, with matched investment from the Queensland Government, to support PsiQuantum, co-founded by Australian quantum leaders Professor Jeremy O'Brien and Professor Terry Rudolph, to build and operate its world-first utility-scale fault-tolerant quantum computer in Australia, and deliver a range of industry and research partnerships.

- This investment shows the Government is serious about delivering a world-leading quantum ecosystem and marks a partnership that will deliver hundreds of direct jobs and billions of dollars in direct investment in Australia.
- As part of this investment, PsiQuantum will:
 - Establish its Asia-Pacific headquarters in Brisbane, along with facilities to build and operate its first utility-scale fault tolerant quantum computer.
 - Deliver multiple generations of quantum computing capability and maintain the product site as a flagship global facility over an expected 20-year economic life.
 - Actively strengthen the local quantum industry by creating opportunities in manufacturing.
 - Build opportunities for partnerships and collaboration with local universities, research institutions and government.
 - Grow the domestic ecosystem, including through funding education programs and creating hundreds of new high-skilled jobs.
- The Australian Government also provided \$60 million in the 2023-24 Budget to grow the quantum sector, including:
 - The \$40.2 million Critical Technologies Challenge Program (CTCP), which will drive greater awareness and uptake of quantum technologies in Australia by putting quantum technologies to work solving national challenges.
 - \$19.8 million to catalyse industry growth, support collaborative research and strengthen Australia’s position as a global quantum leader under the Australian Centre for Quantum Growth (ACQG) program. The University of Sydney has been awarded \$18.4 million to establish the Centre, which they have named *Quantum Australia*.

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- My department has also commenced work on a national audit of quantum infrastructure, monitoring quantum supply chains and a report on quantum workforce needs.
- My department is also working to strengthen Australia's international partnerships in quantum. In July 2024, Australian Government representatives participated in a high-level meeting hosted by the United States, together with representatives from Denmark, Finland, France, Germany, Japan, the Republic of Korea and the United Kingdom.
 - The group discussed developing coordinated approaches to quantum information science and technology, to promote resilient and reliable supply chains, research and development collaboration, and a quantum future in line with shared interests and values.

If asked: Questions relating to Defence Export Controls

- The Department of Defence has been engaging with the Australian quantum industry to ensure they are aware of amendments to the Defence Export Trade Controls Act and Regulations.
- My department has been advising on quantum industry interests throughout the process, including advising the Department of Defence on key stakeholders to consult with.
- Importantly, as AUKUS countries have comparable export control systems our quantum industry is exempt from export control licenses to the US and UK.
- Questions on the Amendments and the consultation process should be directed to the Department of Defence.

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If asked: Questions relating to the request from the Hon Paul Fletcher MP that the Auditor-General conduct an investigation into the investment in PsiQuantum

- I am aware that on 26 August the acting Auditor-General advised the Hon Paul Fletcher MP that the ANAO had considered his request, and has decided to add a potential audit topic on the investment vehicles used by the Australian Government to its 2024-25 work program. This may include the Australian Government's investment in PsiQuantum.
- I welcome any review. The project was subject to rigorous and lengthy assessment and due diligence covering legal, technical, financial and national security assessments. The approach was informed external probity advice.

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- This opens up further avenues for US-Australia collaboration on quantum research and development, in ways that benefit our economic and national security.

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QUANTUM**Issue**

What is the Government doing to put Australia at the forefront of quantum technologies?

Key Talking Points

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- Our vision is for Australia to be a global technology leader by 2030 and ensure that investment and leadership in quantum technologies contribute to a prosperous, fair and inclusive Australia.

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- Since launching the strategy, our quantum sector has gone from strength to strength, with investments by both private and state-backed funds recognising Australia's significant breadth and strength of quantum talent.
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- My department has also commenced work on a national audit of quantum infrastructure, monitoring quantum supply chains and a report on quantum workforce needs.
- My department is also working to strengthen Australia’s international partnerships in quantum. In July 2024, Australian Government representatives participated in a high-level meeting hosted by the United States, together with representatives from Denmark, Finland, France, Germany, Japan, the Republic of Korea and the United Kingdom.
 - The group discussed developing coordinated approaches to quantum information science and technology, to promote resilient and reliable supply chains, research and development collaboration, and a quantum future in line with shared interests and values.

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If asked: Questions relating to Microsoft's exit from quantum computing research in Australia, and the offer to relocate the Sydney University research team to US headquarters.

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If asked: Questions relating to changes to the text of the National Quantum Strategy during the drafting process

- The department made numerous changes to the text of the Strategy during 2023 to respond to feedback provided through normal Government processes.

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Background

- The Defence Trade Controls Amendment Commencement Proclamation 2024 was signed by the Governor General at the 18 July Executive Council meeting and included the Defence Trade Controls Legislation Amendment Regulations 2024.
 - The Defence Strategic Goods List has been updated to include technologies such as quantum computers and semiconductor technologies that meet certain criteria.
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- \$1 million National Quantum Collaboration Initiative funding was awarded to Sydney Quantum Academy to help grow Australia’s quantum industry capability through education and research.

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PSIQUANTUM

Issue

Why has the Government invested in US-based company PsiQuantum?

Key Talking Points

- The Government is committed to ensuring Australia's quantum sector remains a global leader, as outlined in the National Quantum Strategy.
 - The strategy sets out a long-term vision to unlock the immense potential of quantum technologies and includes an ambition to build the world's first error-corrected quantum computer in Australia.
- According to Boston Consulting Group, investing in the world's first utility-scale fault-tolerant quantum computer could lead to an additional \$48 billion in GDP and 240,000 new jobs in Australia by 2040.
- The Government's investment in PsiQuantum aims to deliver the world's first utility-scale fault tolerant quantum computer in Brisbane, Australia.
- PsiQuantum will also build other, more powerful versions of its quantum computers in the Queensland capital in the future.
- PsiQuantum presented a unique opportunity to fast track progress towards our ambitious goals.
 - This assessment was based on rigorous commercial, technology, legal and financial due diligence, drawing on advice from subject matter experts.

Contact: s22, Manager, Technology Investment Branch, s22
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- In return for an Australian Government investment of \$466.4 million, and a similar investment from the Queensland Government, PsiQuantum will:
 - Establish its Asia-Pacific headquarters a Brisbane site, along with facilities to build and operate its utility-scale fault tolerant quantum computer
 - Deliver multiple generations of quantum computing capability and maintain the product site as a flagship global facility over an expected 20-year timeline
 - Actively support localisation of its supply chain and provide opportunities to Australian industry, including in manufacturing
 - Build opportunities for partnerships and collaboration with local universities, research institutions and government
 - Grow the domestic ecosystem, including through funding education programs and creating hundreds of new high-skilled jobs.
- The company has said publicly that it is on an aggressive plan to have the site operational by the end of 2027.
- PsiQuantum is delivering on its commitments to the support the Australian quantum ecosystem. Recent announcements include:
 - A PsiQuantum tenancy at a new laboratory at Griffith University's Nathan Campus in Brisbane. The test and validation lab will ensure the hardware for the quantum computer meets the requisite high performance needs to operate the machine.
 - A partnership with five Queensland universities to build out targeted educational programs to meet the skills requirements for the rapidly growing sector of quantum computing and other advanced technology industries.

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- These commitments translate to knowledge transfer, technology development on Australian soil and a significant boost to our domestic capabilities and economy.
- Australia has a strong domestic quantum ecosystem, filled with world-leading researchers and innovative startups.
 - We have strengths across many quantum technologies – for example, Quintessence Labs is providing quantum-based cryptographic solutions to 18 countries and Nomad Atomics is developing quantum field sensors for navigation and to find mineral deposits.
 - Australia also has a disproportionate number of the world’s top 10% most cited quantum researchers.
- We will continue to support domestic quantum companies, including through the National Reconstruction Fund (NRF), and other quantum initiatives under the National Quantum Strategy.
 - We provided \$60 million in the 2023-24 Budget to grow the quantum sector.
 - The NRF earmarks \$1 billion for critical technologies, including quantum.

If asked: Will the Brisbane FTQC be upgraded in line with technical developments?

- Yes. PsiQuantum will deliver multiple generations of quantum computing capability in Brisbane. This includes building other, more powerful computers in Australia, beyond the first FTQC, and maintaining the product site as a flagship global facility over an expected 20-year timeline.

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If asked: Will the government have guaranteed access to the FTQC?

- PsiQuantum has committed to providing opportunities for Australian researchers and companies to access the capability, in line with PsiQuantum's commercial strategy.
- The details of these arrangements are commercial-in-confidence.

If asked: Why wasn't there a public Expression of Interest process or procurement to choose a company to deliver the quantum computer capability?

- The Government ran an Expression of Interest (EOI) process in August 2023 to understand the capability and interest in delivering a commercial-scale fault tolerant quantum computer in Australia by 2030 and delivering a range of related benefits to strengthen Australia's quantum sector and contribute to the national interest.
- The approach was designed to understand alternative options and inform assessments of value for money, consistent with the obligations in the *Public Governance, Performance and Accountability Act 2013* (Cth) in relation to the proper use of public monies.
- The approach was informed by the guidance and principles in the Commonwealth Investment Framework, along with expert technical and probity advice. It was carefully designed to not favour a particular technology type.
- Twenty-one companies were invited to respond to the EOI process—the department took a broad and inclusive approach, based on expert advice.
- The EOI was one of a range of inputs to the Government's decision to fund PsiQuantum, along with extensive commercial, legal and technical due diligence.

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If asked: Questions relating to the commercial conditions of the PsiQuantum transaction

- Details of the transaction are commercial-in-confidence.
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If asked: Questions relating to PsiQuantum and the Chicago Quantum Proving Ground

- I welcome investment by the United States Government and State of Illinois to develop a Quantum Proving Ground, with the selection of PsiQuantum as anchor tenant reflecting the strength of Australia’s investment in the company.
- This opens up further avenues for US-Australia collaboration on quantum research and development, in ways that benefit our economic and national security.

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PSIQUANTUM

Issue

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Key Talking Points

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 - The strategy sets out a long-term vision to unlock the immense potential of quantum technologies and includes an ambition to build the world's first error-corrected quantum computer in Australia.
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- These commitments translate to knowledge transfer, technology development on Australian soil and a significant boost to our domestic capabilities and economy.
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 - We provided \$60 million in the 2023-24 Budget to grow the quantum sector.
 - The NRF earmarks \$1 billion for critical technologies, including quantum.

If asked: What national security advice was provided to the Government?

- Government considers the national security implications of many issues, including critical technologies.
- A spokesperson for Minister Husic has previously said that the PsiQuantum investment was “subject to rigorous and comprehensive due diligence across several areas, including national security”.
- It would not be appropriate to comment further on national security or defence matters.

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If asked: Questions relating to the commercial conditions of the PsiQuantum transaction

- Details of the transaction are commercial-in-confidence.
- Financing is being provided through EFA.
- EFA published the transaction amount and the split between equity and loans on its transaction register in June 2024.
- EFA disclosed the interest rates on the loans in the Government Gazette on 31 October 2024.
- Tenor remains commercially sensitive and is not disclosed.
- These are the typical and established disclosures for transactions on the National Interest Account, consistent with the requirements of the *Export Finance and Insurance Corporation Act 1991* (EFIC Act).

If asked: Will the government have guaranteed access to the FTQC?

- PsiQuantum has committed to providing opportunities for Australian researchers and companies to access the capability, in line with PsiQuantum's commercial strategy.
- The details of these arrangements are commercial-in-confidence.

If asked: Why wasn't there a public Expression of Interest process or procurement to choose a company to deliver the quantum computer capability?

- The Government ran an Expression of Interest (EOI) process in August 2023 to understand the capability and interest in delivering a commercial-scale fault tolerant quantum computer in Australia by 2030 and delivering a range of related benefits to strengthen Australia's quantum sector and contribute to the national interest.
- The approach was designed to understand alternative options and inform assessments of value for money, consistent with the obligations in the

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Public Governance, Performance and Accountability Act 2013 (Cth) in relation to the proper use of public monies.

- The approach was informed by the guidance and principles in the Commonwealth Investment Framework, along with expert technical and probity advice. It was carefully designed to not favour a particular technology type.
- Twenty-one companies were invited to respond to the EOI process—the department took a broad and inclusive approach, based on expert advice.
- The EOI was one of a range of inputs to the Government’s decision to fund PsiQuantum, along with extensive commercial, legal and technical due diligence.
- The EOI Evaluation Report was published in October 2024, in response to the Senate Order for the Production of Documents No. 606.

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