

Ideas into impact

Accelerating science and innovation for a better future

Discussion paper



Prepared by: Department of the Environment, Tourism, Science and Innovation

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Acknowledgement of Country

The Queensland Government acknowledges Aboriginal peoples and Torres Strait Islander peoples as the Traditional Owners and custodians of the land. We recognise their connection to land, sea and community, and pay our respects to Elders past, present and emerging.

February 2026 | #33142

Cover image: University of Southern Queensland's Dr Lauren Goldspink and Neil Robinson in the glasshouse with the PlantEye 3D Multispectral Scanner, which is reshaping how plant research is conducted at the university. © University of Southern Queensland

Minister's message



It all starts with an idea.

An idea has the power to spark change, to challenge the status quo, and to shape the future. Here in Queensland, we believe that great ideas deserve the opportunity to grow, thrive, and make a difference.

But ideas alone are not enough. They need the right environment, the right support, and the right partnerships to transform into tangible solutions that solve the world's greatest challenges.

That's where we come in.

The Crisafulli Government is delivering a better lifestyle for Queenslanders, which is why we are unlocking a future where science and innovation flourish. We are building a dynamic system where creativity meets opportunity, where bold thinking is backed by investment, and where collaboration drives progress.

Put simply, we want to accelerate science and innovation for a better future.

Our vision is clear: to position Queensland as a leader in science and innovation, a place where ideas are not only born but are nurtured into commercial successes that benefit our communities, our economy, our regions and our planet.

As Queensland's Minister for Science and Innovation, I'm excited to share this discussion paper with you. It's an opportunity for us to work together to shape the future of science and innovation across Queensland.

We are ideally positioned to attract investment, form strategic partnerships and drive the development of globally competitive industries. Now is the time to leverage our dynamic science and innovation system to nurture our home-grown success stories.

The 2032 Olympic and Paralympic Games are a once-in-a-lifetime chance to show the world what Queensland can do on the world's stage. They will be a catalyst for technological advancement and a magnet for investment, partnerships and talent that will benefit Queenslanders for generations to come.

Now, we need to work together to make the most of these opportunities, secure investment from third parties, and create jobs and industries for the future.

This is where you come in. Your ideas and feedback are vital to shaping this vision. I encourage you to share your thoughts and help us accelerate science and innovation and make life better for everyone in Queensland.

Thank you for being part of this important conversation.

A stylized, handwritten signature in black ink, appearing to read 'Andrew Powell'.

The Honourable Andrew Powell MP

Minister for the Environment and Tourism and
Minister for Science and Innovation

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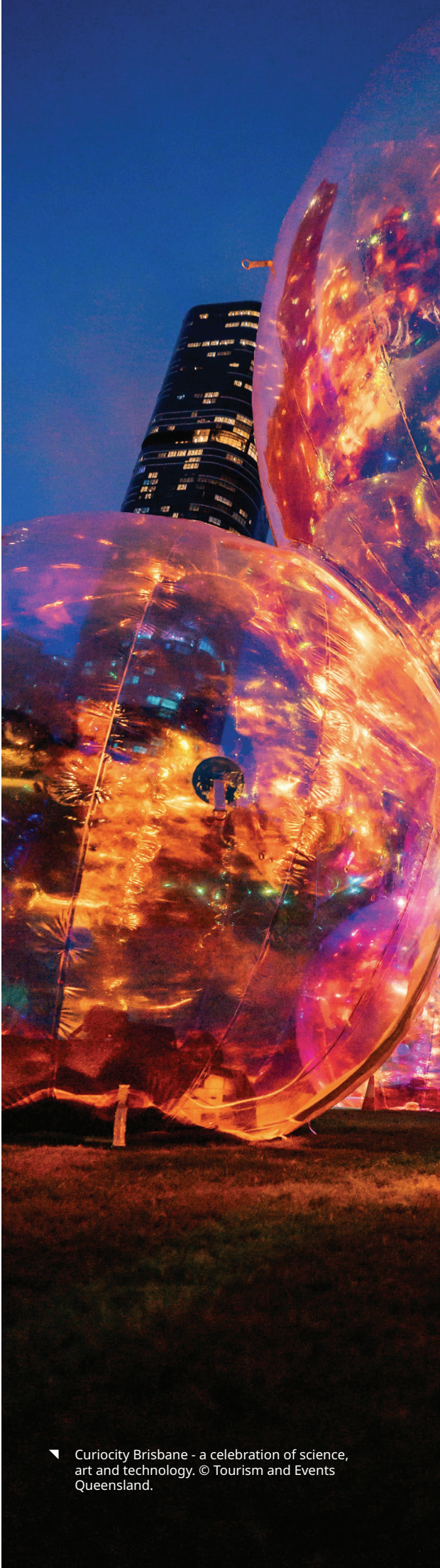
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▼ Curiosity Brisbane - a celebration of science, art and technology. © Tourism and Events Queensland.



Ensuring our economy is built for the future

Queensland has a proud history of innovation, from pioneering advancements in agriculture and mining to breakthroughs in medical research and renewable energy.

But global disruptions have highlighted the limitations of rigid systems and the necessity for adaptive, innovative solutions.

And now, with the world's eyes on Queensland in the lead up to 2032, we have a once-in-a-generation opportunity to showcase our capabilities and secure investment that drives growth.

To cement Queensland's future as a leader, we will build on our strong foundations by co-designing a long-term, evidence-informed strategy in partnership with Queensland's science and innovation stakeholders and the community.

This strategy will take bold action, secure investment in emerging technologies, and create a coordinated, purpose-driven innovation system to strengthen our economy and build resilience.

And to do that, we need you.

You can help make Queensland's future better by having your say about how we can strengthen our science and innovation system.

Your input will help shape a unified approach to science and innovation, unlocking productivity, growth, and enhancing industries across our great state.

Turning ideas into economic success

The time is now to capitalise on the green and gold runway ahead of the 2032 Olympic and Paralympic Games.

Queenslanders are problem solvers and our academic institutions produce world-class discoveries, yet too few are translated into market-ready products and services.

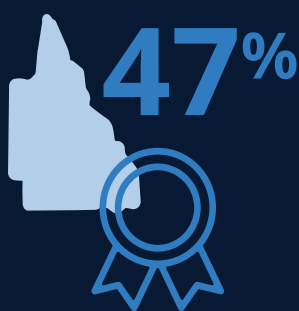
Queensland's priority industries including biomedical, defence, biofuels, mining and agriculture rely on science and innovation to scale and remain competitive. By improving pathways from ideas and research to commercial outcomes and fostering collaboration, we can support growth in emerging industries, attract private capital, and ensure Queensland businesses capture the economic value of innovation rather than seeing it flow offshore.

Across the state, businesses and researchers are already driving breakthroughs in agriculture, advanced technologies, and critical minerals. Accelerating these efforts will create high-value jobs and strengthen Queensland's position in emerging industries.



WorkWindow Founder demonstrating their virtual reality technology.

Queensland is open for business



47% of Queensland businesses were innovating in 2022-2023, more than New South Wales (45.3%) and Victoria (46.8%)¹



Every \$1 invested in innovation in Australia returns at least \$3.50 in economic benefits²



More than 350,000 Queenslanders were employed in science, technology, engineering, and mathematics (STEM) jobs in 2024³



Queensland is home to 8 world-class universities and more than 300 specialised research facilities and institutions⁴

1. [Australian Bureau of Statistics, Innovation in Australian Business, 2022-2023](#)
2. [CSIRO \(2021\), Quantifying Australia's returns to innovation](#)
3. ABS Labour Force Survey. Department of the Environment, Tourism, Science and Innovation, 2025, Science Strategy baseline report (unpublished)
4. [World university rankings 2026](#)





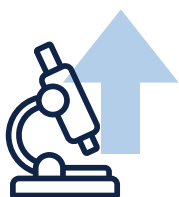
Key focus areas

Queensland is well-placed to harness and activate our local science and innovation sectors to tackle new challenges, grow and strengthen our economy, and benefit both our communities and the environment. With a collaborative and entrepreneurial mindset, innovative businesses, highly skilled workers, strong research base, and emerging innovation precincts and hubs, we are ready to attract co-investment, strengthen connections across the innovation system, and support the growth of competitive businesses and industries. A new strategy for Queensland will map out a future where science and innovation drive progress and productivity, empower communities, scale commercial outcomes for impact, and unlock opportunities for all Queenslanders.

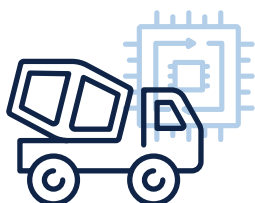
- ▼ HeliMods provides innovative aerospace products and technologies that enable customers to perform a range of complex missions – including emergency medical retrieval, search and rescue, aerial policing and special operations.

1. Boosting capability

Queensland's ability to attract investment and create jobs depends on developing talent, enhancing skills and improving access to world-class research infrastructure. By removing barriers and upskilling, including for underrepresented communities, we can better leverage our science and innovation system to drive economic growth and help position Queensland as a leader.



23% growth in Queensland's STEM-qualified workforce between 2011 and 2022, similar to other jurisdictions⁵



Almost half of Queensland's STEM workforce in small to medium-sized enterprises are employed in construction, professional, scientific and technical services and manufacturing sectors⁶

Harnessing world-class research

Queensland is home to world-leading universities, cutting-edge research institutions and more than 300 specialised facilities, including Australian Research Council Centres of Excellence, Cooperative Research Centres and National Health and Medical Research Council-accredited Research Translation Centres. Backed by a highly skilled STEM workforce, these centres connect our research capabilities with industry needs, delivering innovative solutions to real-world challenges, strengthening our economy and communities.

Our international partnerships demonstrate Queensland's ability to collaborate on a global scale, using shared expertise to address key challenges and unlock opportunities. The \$280 million Translational Science Hub (TSH) is a prime example, bringing together the Queensland Government, French multinational pharmaceutical company Sanofi, Griffith University and The University of Queensland. With bases in Brisbane and the Gold Coast, the TSH connects Queensland researchers with Sanofi scientists in Australia, France, and the United States to advance mRNA vaccine development and biomedical research. Partnerships like this help Queensland address challenges while supporting industry growth, exports, and job creation.

5. Current State Analysis Report 2024. Unpublished (Australian Bureau of Statistics (2022) 'Qualifications and work dataset')

6. [State of Innovation Project – Insights Note #1, 2023, High-Growth SMEs and STEM Workforce](#)

7. [World university rankings 2026](#)





Case study

National Rugby League innovation partnership

The Queensland Government and National Rugby League (NRL) have a three-year partnership to uncover innovative technologies and solutions through the NRL Magic Round.

Eight Queensland businesses took part in the first NRL Magic Round Tech Sprint delivered by the Australian Sports Technologies Network in 2025. The 10-week program provided access to NRL experts so businesses could adapt their technologies to address priorities including fan engagement, athlete performance and wellness, accessibility, and participation.

The NRL Magic Round Tech Showcase demonstrated cutting-edge technologies such as immersive experiences, artificial intelligence, micro-wearable sensors, and 3D scanning.

Partnership outcomes include:

- strengthening Queensland's position as a global innovation leader in sports and major events
- Queensland technologies being piloted at live events
- local businesses being showcased in Las Vegas at the 2026 NRL Business of Sport Conference
- interest from international sporting organisations in Queensland technologies.



Creating pathways for Queensland's future innovators

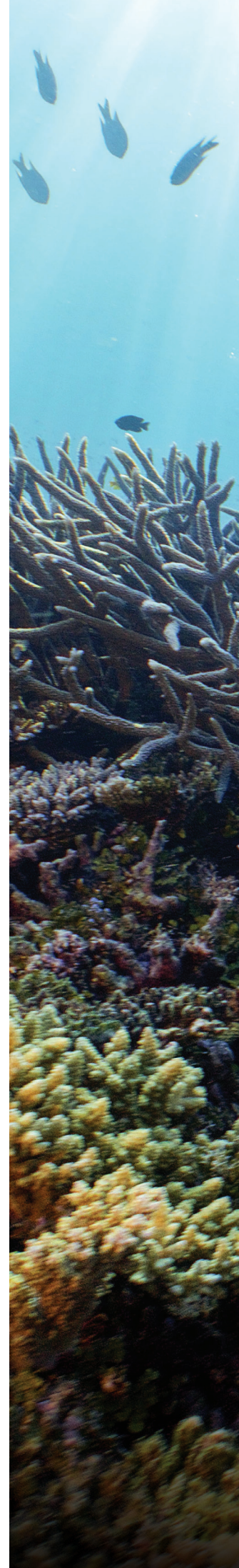
Queensland's scientists, researchers, and innovators are at the forefront of breakthroughs and discoveries that improve the lives of Queenslanders. To further build on their success, we need dynamic talent pathways that inspire young people to start businesses, pursue studies and careers in STEM, health, and social sciences from school through university, vocational education, and beyond. At the same time, we recognise there is a growing need for specialist skills such as commercialisation and product development, to support the effective translation of ideas into impact.

Leveraging Queensland's unique natural assets

Queensland's unique natural environment has helped us to excel in environmental science and innovation. From the Great Barrier Reef and tropical rainforests to expansive rangelands and world-class national parks, Queensland's natural assets are not only iconic but also critical to advancing research and solutions in key areas. We are leading the way in climate adaptation, biosecurity, marine research, tropical health, and environmental science, while fostering partnerships with First Nations knowledge holders to integrate traditional knowledge.

Share your thoughts on...

- What is the role of the Queensland Government in supporting people and organisations to create new knowledge and innovative solutions?
- What skills or training opportunities do you think are most needed to prepare Queenslanders for future jobs in the science and innovation sectors?
- How can we ensure that all Queenslanders, including from underrepresented communities, have equal access to education and career pathways in STEM and innovation?
- How can we encourage more collaboration between entrepreneurs, researchers, government, and investors to drive innovation in Queensland?
- What Queensland resources could be leveraged further for science and innovation?
- How can the Queensland Government support the next generation of innovators to set up shop in Queensland?





▼ Heron Island, Great Barrier Reef.
© Tourism and Events Queensland.

2. Enhancing connections

Strong connections across Queensland's science and innovation system unlock collaboration, accelerate knowledge sharing, and drive innovation. By linking expertise across industries, research sectors, precincts, and regions, we can leverage existing and evolving opportunities.



7 major innovation and science precincts across the state



Queensland's regional universities increased their Commonwealth research and development funding from 0.76% of the national total in 2016 to 2.75% in 2025 (363% increase)⁸



4.3% of Queensland businesses collaborated with a university on innovation in 2022-23⁹

8. Australian Research Council, National Collaborative Research Infrastructure Strategy, National Health and Medical Research Council, and Medical Research Future Fund data from the Department of the Environment, Tourism, Science and Innovation, 2025, Science Strategy baseline report (unpublished)
9. [Australian Bureau of Statistics \(2024\), Innovation in Australian Business](#)



Case study


Queensland Defence Science Alliance

The Queensland Defence Science Alliance (QDSA) is entering a new phase, backed by a \$2 million investment over four years from the Queensland Government. This funding, combined with contributions from member universities and the Australian Government, is set to foster innovation, create new opportunities for local businesses, address critical defence challenges, and position Queensland as a leader in defence-related research and development.

This collaborative partnership involves Australia's Defence Science and Technology Group, the Queensland Government, five Queensland universities (The University of Queensland, Griffith University, James Cook University, University of the Sunshine Coast and University of Southern Queensland), and Charles Darwin University, Northern Territory.

Through its Collaborative Research Grants program, the QDSA is supporting groundbreaking projects that have potential to transform defence capabilities and deliver tangible benefits for Queensland including:

- developing advanced sensors for navigation in environments where Global Positioning System (GPS) signals are unavailable
- harnessing artificial intelligence to control multiple autonomous vehicles
- creating compact, portable power solutions for field hospitals and remote communications facilities
- innovating new fabrication methods for diamond-like materials coatings to protect equipment in harsh environments
- integrating long-range cargo uncrewed aerial vehicles (UAV) into battlespace operating systems, enabling more efficient logistics in challenging terrains
- developing 3D printed ceramics for temperature-resistant and load bearing aerostructures, advancing manufacturing capabilities and aerospace technology.



▼ Dr Roger Stuckey, Associate Director QDSA, using the augmented reality sand table, designed for collaborative mission planning, at the QDSA Showcase Event. © QDSA.

Unlocking collaborative solutions

Queensland's economy faces unique environmental, social and economic challenges, but these also present opportunities to lead the way in innovation and problem-solving. Queensland's scientists, researchers, innovators and high-growth firms are key to developing and deploying solutions and advanced technologies to tackle these challenges.

Connecting people, ideas and opportunities through precincts and hubs

Innovation precincts and hubs are vital to Queensland's science and innovation system, attracting talent, investment, and fostering collaboration between researchers, businesses, and industries.

Focusing on Queensland's strengths in biotechnology, environmental science, renewable energy, and advanced manufacturing, these hubs attract talent, provide access to shared research infrastructure, foster collaboration, and turn ideas into tangible solutions.

Regional hubs like Townsville drive research in key areas such as marine ecosystem (at the Australian Institute of Marine Science), tropical health (at the Australian Institute of Tropical Health and Medicine), and Indigenous health (at James Cook University).

These hubs provide local research and innovation capability through training, mentoring, infrastructure and more, improving local environmental, health, social and economic outcomes.

With Queensland's proximity to Asia-Pacific markets these hubs strengthen international collaboration and open pathways for growth. To maximise their impact, Queensland must better connect precincts, unlock resources, and adopt international best practices. This includes partnering with Traditional Owners to deliver benefits across Queensland's communities.

Share your thoughts on...

- What is the role of the Queensland Government in strengthening collaboration across the science and innovation system?
- How can we better connect Queensland businesses, researchers, and communities to create a thriving science and innovation system in Queensland?
- What opportunities exist to better connect innovators, researchers, businesses, and communities?
- How can we better connect Queensland's innovation precincts and hubs to create a more cohesive and impactful network? And how can we ensure that these precincts and hubs are accessible and beneficial to local communities, including underrepresented groups?
- How can science and innovation best leverage the unique geography of Queensland, including through support of regional economies?
- How can we encourage more startups and businesses to collaborate with research institutions?

Case study

Gold Coast Health and Knowledge Precinct

The 200-hectare Gold Coast Health and Knowledge Precinct is one of Queensland's leading innovation districts, where collaboration between researchers, clinicians, entrepreneurs and industry is transforming ideas into impact.

Born from the legacy of the 2018 Commonwealth Games, the Precinct has evolved into a vibrant destination for health, research and technology innovation. By bringing together Griffith University, Gold Coast Health, City of Gold Coast and the Queensland Government, it is the ideal setting for collaboration, research excellence and commercial partnerships to flourish.

The precinct is home to more than 16,000 people working, studying and innovating, and continues to attract national and international investment across fields such as biotechnology, medtech, sportstech and digital health. Groundbreaking initiatives include world-first clinical trials in spinal cord injury and the total artificial heart, showcasing Queensland's strength in translating research into life-changing outcomes.

By linking expertise and shared infrastructure, the Gold Coast Health and Knowledge Precinct is diversifying the Gold Coast economy and positioning Queensland as a destination where discovery, innovation and enterprise come together to create a healthier, smarter future for all.



▼ Aerial image of the Gold Coast Health and Knowledge Precinct.
©2025 Gold Coast Health and Knowledge Precinct.

3. Supporting commercialisation

Unlocking Queensland's economic potential requires fostering innovation, building strategic partnerships, and supporting the commercialisation of cutting-edge research. By focusing on priority businesses and emerging technologies that transform industries such as AI, quantum, renewable energy, and digital health, Queensland can attract global investment, support businesses to scale, and turn scientific discoveries into solutions.



Queensland businesses spend half (0.59%) that of New South Wales (1.17%) and Victoria (1.15%) counterparts on research and development, as % of Gross State Product in 2023-24¹⁰



According to Dealroom, Queensland has created 3 unicorn companies¹¹ (privately held companies worth more than USD 1 billion)

Empowering high growth innovative businesses

Empowering high growth innovative businesses starts with creating the right conditions for them to succeed. Queensland needs to ensure we create an environment where businesses across the state can access the tools, resources, and support they need to thrive. By providing access to knowledge, infrastructure, people, and markets, Queensland can help businesses scale their operations, attract global customers, and remain competitive. These businesses are tackling challenges, creating future-focused industries, generating high-value jobs, and disrupting traditional markets, making a significant contribution to Queensland's economy.


Building Queensland's economy for tomorrow

The acceleration of advanced technology research and adoption by Queensland's businesses and industries helps modernise industries to remain competitive, build future-focused sectors and support our regional economies to grow. Science and innovation are critical drivers of economic growth and competitiveness. With the Brisbane 2032 Olympic and Paralympic Games fast approaching, Queensland has a unique opportunity to lead in sport science, sports technology, and related fields, positioning the state for success on the global stage and beyond. Future focused technologies such as quantum, advanced technologies, biotechnology, AI, robotics and clean energy will help turn scientific excellence into outcomes, create opportunities for new industry partnerships and diversify our economy. By working together across Queensland's science and innovation sector, we can coordinate investments, equip researchers and innovators with the right tools, and secure resources to bring ideas to life.

10. Australian Bureau of Statistics, Business Expenditure on R&D, 2023-24 [Research and Experimental Development, Businesses, Australia, 2023-24 financial year](#) | [Australian Bureau of Statistics](#)

11. Dealroom Queensland data, as at June 2023





▼ The Translational Research Institute houses the Translational Science Hub. © Translational Research Institute

Case study

Translational Science Hub

The Translational Science Hub (TSH) is a collaboration between the Queensland Government, Sanofi, The University of Queensland, and Griffith University. This partnership is focused on developing new vaccines and advancing Queensland's biomedical research capabilities. To date, the TSH's work includes evaluating mRNA vaccines and developing a world-first chlamydia vaccine, with 26 clinical trial sites and seven laboratory partners contracted across Australia. Seven vaccine trials have commenced, 23 Queensland businesses are engaged in the vaccine pipeline, and 93 highly skilled jobs have been created in the state.

The TSH has also established preferred site partnerships for regional clinical trial delivery with the University of Sunshine Coast Clinical Trials and the Griffith Clinical Trials Unit. Additionally, 30 research projects are underway, involving collaboration between The University of Queensland, Griffith University, the Queensland University of Technology, and Sanofi's global scientific teams.

The TSH is delivering on the goal of improving people's lives by leveraging global partnerships to foster ongoing development of Queensland's vaccine and therapeutics ecosystem, unlocking the value of our world-class research.

Share your thoughts on...

- What is the most valuable role the Queensland Government can play to help innovators to commercialise their ideas and increase economic success?
- How can we leverage international partnerships to bring more opportunities and investment to Queensland's science and innovation sectors?
- What can governments at all levels do to support increased commercialisation outcomes and opportunities for our researchers and innovative businesses?
- What barriers need to be addressed to enable more commercialisation opportunities for our state's researchers and innovative businesses?
- What should the role of Queensland Government be in addressing these barriers?
- What role does science and innovation play in growing Queensland's future industries and contributing to the Queensland economy?
- How can the Queensland Government help to fast-track opportunities that will set the 2032 Olympic and Paralympic Games up for success? Think: sports science, sports technology, and more.
- How can the Queensland Government empower high growth businesses to succeed?

Case study

SwarmFarm Robotics

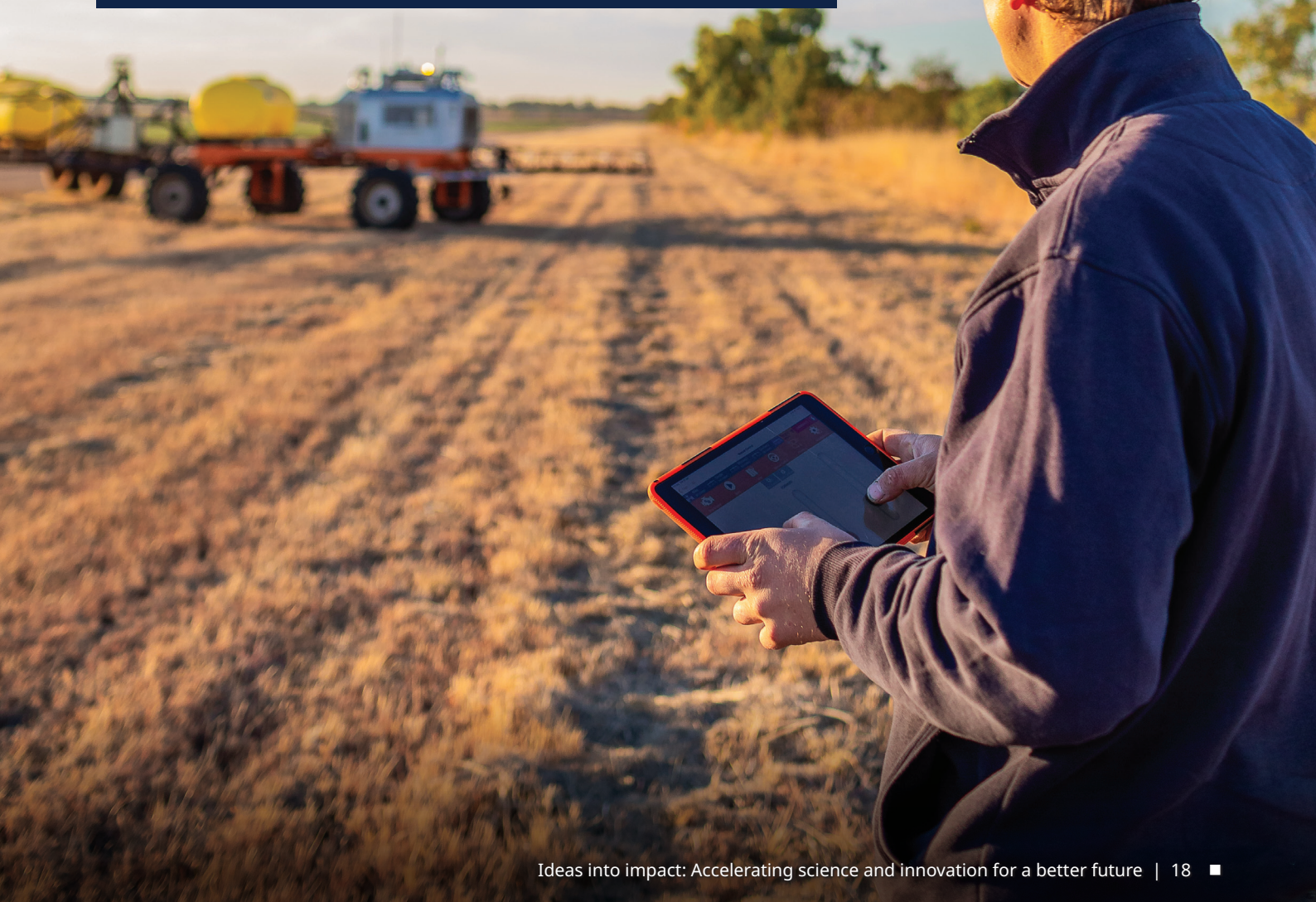
From their farm in Central Queensland, Andrew and Jocie Bate of SwarmFarm Robotics envisioned a future where smaller, smarter machines could revolutionise farming practices.

Today, their robots help farmers improve productivity while reducing environmental impact, showcasing the global potential of Queensland's innovations.

SwarmFarm Robotics and their agricultural technology is now a major commercial success, creating jobs and attracting investment to regional Queensland.

The opening of their new manufacturing hub on the Darling Downs in 2025 has further strengthened their ability to scale production, meet growing demand, and deliver cutting-edge technology to farmers across Australia and beyond.

SwarmFarm Robotics shows how Queensland's science and innovation system can support businesses to commercialise their ideas. By turning self-operating farming technology into a globally competitive system SwarmFarm Robotics has helped to position Queensland as a leader in agricultural innovation.



Next steps

This discussion paper marks the first step in our consultation process. It starts with an idea and your input can help bring it to life.

All feedback will be carefully considered, and we will use your contributions to shape our way forward, culminating in the release of a new science and innovation strategy.

Have your say

You can share your views by:

- completing an **online survey**
- emailing a submission to **ScienceandInnovation@detsi.qld.gov.au**
- attending a **consultation session** hosted by the department to examine key topics.

Online survey

The department is seeking feedback on this discussion paper through the consultation hub at www.detsi.qld.gov.au/consultation

The questions posed in this paper provide the basis for the survey. You can answer any or all questions. Your answers can contain facts, opinions, arguments and recommendations centred around this discussion paper.

If you have any questions about the consultation process, please contact us via email to ScienceandInnovation@detsi.qld.gov.au

Consultation closes on 31 March 2026.

Confidentiality

In the interest of transparency and to promote informed discussion, we would prefer submissions to be made publicly available wherever this is reasonable. If confidentiality is preferable, this should be clearly noted on the front page of the submission.

While the Queensland Government will endeavour to identify and protect material claimed as confidential, exempt information and information of which the disclosure would be contrary to the public interest (within the meaning of the Right to Information Act 2009), it cannot guarantee that submissions will not be made publicly available. There is a possibility that the department may be required to reveal confidential information as a result of a right to information request.

▼ Eclipse Ingredients, led by dietitian-turned-entrepreneur Siobhan Coster, is a Brisbane based biotechnology startup that is transforming the way high value bioactive ingredients are produced.

Eclipse, which emerged from CSIRO, harnesses precision fermentation to sustainably produce human-identical lactoferrin. This is a key protein found in breast milk with proven benefits for immunity, iron absorption, and microbiome health.

The company offers a scalable and environmentally responsible alternative to extractive ingredient production. Its initial focus is on skincare applications, with broader use in food and nutritional supplements on the horizon.



