

A new education precinct for Southern Tasmania

Science, technology, engineering and maths are vital for a resilient and prosperous Tasmania.

These skills are critical drivers for meeting Tasmania's workforce needs, driving productivity and economic development, and improving employment and life outcomes across our population. We need STEM skills and innovation to respond to climate change and adapt to the technological revolution reshaping our world.

And yet the number of Tasmanians studying STEM at high school and university is low and falling. We face workforce shortages in critical industries and our productivity is lagging more than 25 percent behind the rest of Australia.

We must turn these trends around. To do so, we must invest in new STEM educational facilities which will engage our community in a STEM-led future for Tasmania.

The University of Tasmania's southern STEM infrastructure at Sandy Bay is in urgent need of renewal – our buildings are aged, ill-suited for contemporary teaching, and not up to modern accessibility standards.

Cutting-edge, accessible university STEM facilities are critically needed to support essential teaching and research, attract staff and students, engage school students in STEM fields, and foster collaboration and innovation with industry.

We know it works. The new purpose-built home for our Institute for Marine and Antarctic Studies has helped catalyse and turbo-charge our science, solidifying Tasmania's place as an unquestioned global leader in the field. Since it opened on Hobart's waterfront ten years ago, student numbers have grown by 220%, and we've secured more than \$325,000,000 in research funding.

We are seeking a partnership between the University and all three levels of government to deliver new STEM facilities for Tasmania at our Sandy Bay campus, a project expected to cost in the order of \$500 million.



Tasmania needs an educated, skilled STEM workforce to meet sector growth, deliver on State projects and improve productivity

The current volume of graduates in STEM fields is too low to sustain the current workforce, let alone support the State's future needs.

- It is STEM workers who will turn Tasmania into the battery of the nation, help unlock the potential of renewable hydrogen and grow the State's agricultural farm gate value to \$10 billion a year
- With declining enrolment rates in pre-tertiary STEM school subjects, fewer school leavers are prepared to study STEM-related disciplines at university

Modest changes won't reverse these long-term trends. To improve employment outcomes, ensure our key industries remain competitive, and support Tasmania's economic resilience, we need a significant shift in our approach through large-scale investment and a coordinated effort from both education and industry partners.

Investing in tertiary facilities for science, technology, engineering, and maths in Tasmania will turn these education and workforce trends around, lifting Tasmania's productivity through economic growth and ensuring we can deliver on key State and National priorities.

There is support from across the political spectrum for the STEM investment and the State Government is actively working with the University to secure funding. Nine Tasmanian Senators co-signed a motion in support in August 2024 and the City of Hobart has made it an advocacy priority.

The University has successfully delivered new facilities in the North and North-West in collaboration with all levels of government, creating more opportunities for Tasmanians to access higher education. To ensure a good outcome for Tasmania, all levels of government and the University along with industry must continue working together as we did in Northern Tasmania, to deliver an innovative, engaging STEM precinct at Sandy Bay.

↓ **14%**

Enrolments in pre-tertiary STEM subjects¹

3 in 5

Tasmanian businesses don't have skills for emerging technologies²

↓ **26%**

Productivity lower than the national average³

↓ **2000**

Shortfall for each key role: engineers, IT and tech professionals⁴

↓ **25%**

Proportion of Tasmanians with a STEM degree compared to national levels⁵



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We've seen how transformative the University redevelopment in Launceston has been and now it's time for Hobart to get the facilities it deserves. It's vital that we have fit-for-purpose facilities especially for STEM."

– Tasmanian Chamber of Commerce and Industry CEO Michael Bailey

Investing in STEM is investing in Tasmania's future

A new precinct will enable:

- An increase in STEM graduates for Tasmania, leading to improved employment outcomes and higher lifetime wages, strengthening the State's economy and economic resilience
- Enhanced and contemporary educational experiences for students, including hands-on learning and access to emerging technologies
- The ability to attract and retain high quality educators and researchers to a regional university, providing access to critical equipment
- Programmed community and schools engagement in partnership with industry, to foster STEM aspirations and increase understanding of education and employment opportunities
- Upskilling and building STEM capacity of primary and secondary school teachers, to lift workforce capability and to engage the next generation of students
- Potential to establish an innovation precinct, co-locating vocational and high school facilities, a public science attraction and industry presence
- The creation of local jobs during and after construction, supporting state and national labour markets through driving job growth and increasing employment opportunities
- Urban renewal of Sandy Bay campus consolidating it into a vibrant, innovative, liveable and inclusive place with sustainable development, community connection, and protection of existing bushland



Alumna Jillian Formentin (Bachelor of Engineering (Hons)), grew up in Southern Tasmania and has built an impressive career as an impactful engineer and leader.

Recently named Australian Engineer of the Year, Jillian is a strong advocate for encouraging collaboration, diversity, safety, and sustainability in engineering.

"Today, the skill sets that come with Engineering are desperately needed. We need people who have a passion for bringing practical science to the decisions that need to be made in the world today, to be able to see themselves in these roles where they can live their best lives and make a big difference," Jillian says.



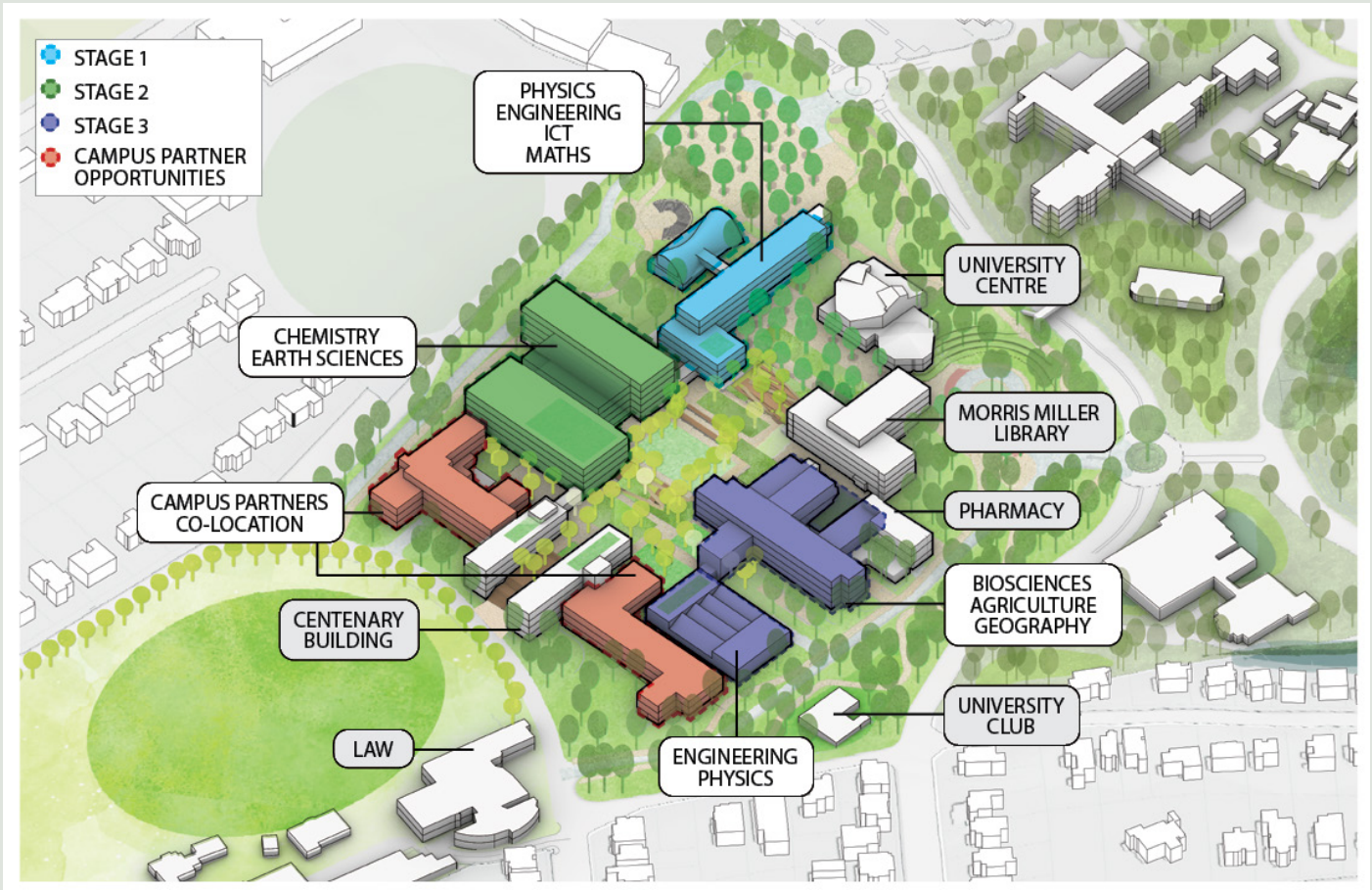
"Tasmania needs STEM workers to prepare our island economy for the digital economy... UTAS needs a STEM precinct to educate young Tasmanians for that future. It's that simple."

– Tasmanian Minister for Innovation, Science and the Digital Economy Madeleine Ogilvie

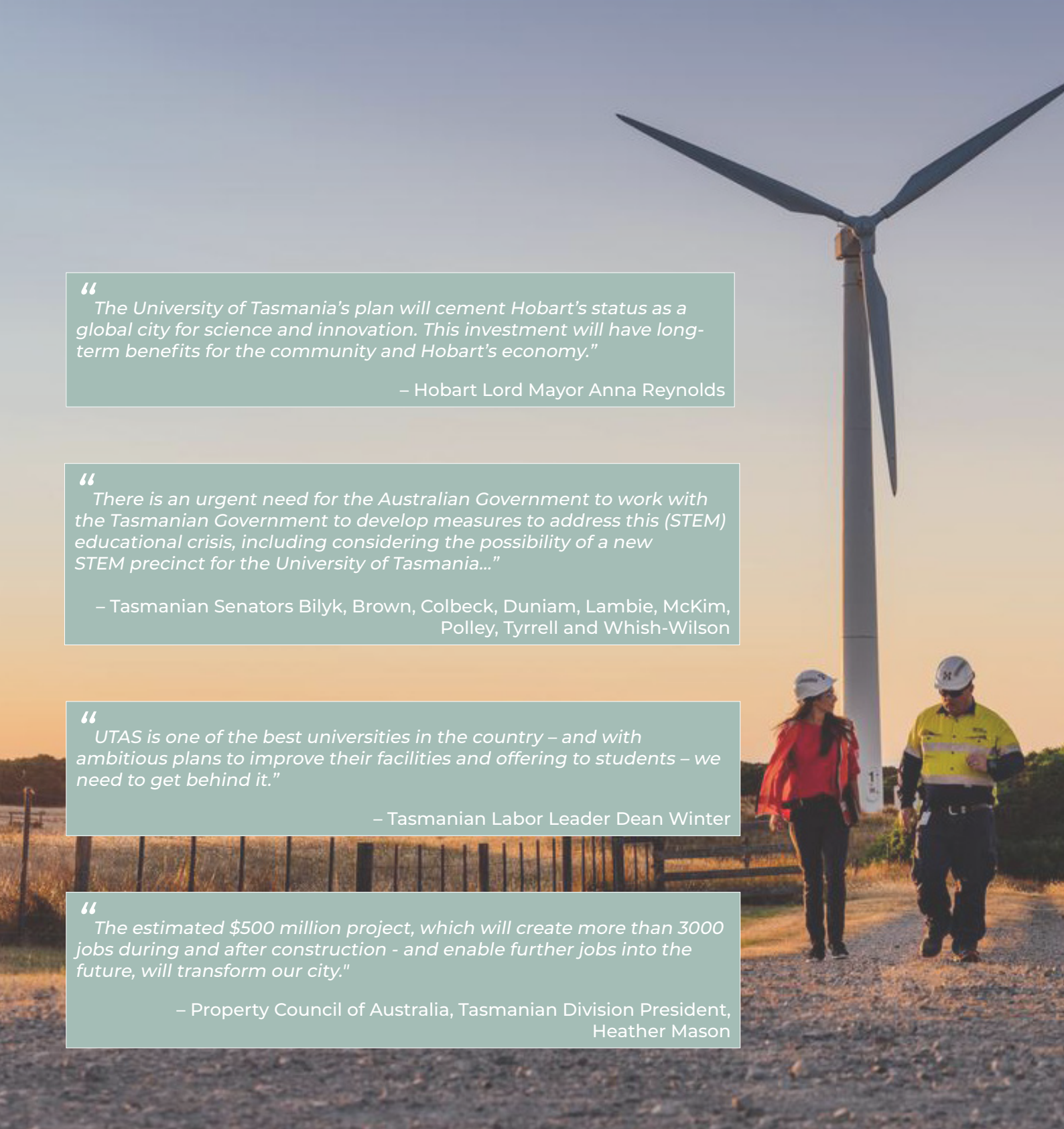
"The STEM Campus has the potential to bring together the University, students, industry, and the community to put STEM front-and-centre. It can't be allowed to be forever a great idea in search of a financial backer."

– TasICT General Manager, Russell Kelly

Concept and indicative timelines for design and construction



STAGE 1 (\$50 million)	Detailed site planning and extensive retrofit of an existing building to create new spaces for Information and Communication Technology, Mathematics, Physics and Engineering	2025 - 2026
STAGE 2 (\$300 million)	A major new build featuring a range of teaching, workshop and research lab spaces and the home of Chemistry and Earth Sciences, and a public STEM engagement centre	2025 - 2029
STAGE 3 (\$150 million)	Extensive retrofit of existing buildings to create new facilities for Biosciences, Agriculture, Geography and a renewed Engineering Workshop and Central Science Laboratory	2028 - 2031
CAMPUS PARTNER OPPORTUNITIES	Potential to establish an innovation precinct, with co-location opportunities for education and industry partners	



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The University of Tasmania’s plan will cement Hobart’s status as a global city for science and innovation. This investment will have long-term benefits for the community and Hobart’s economy.”

– Hobart Lord Mayor Anna Reynolds

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There is an urgent need for the Australian Government to work with the Tasmanian Government to develop measures to address this (STEM) educational crisis, including considering the possibility of a new STEM precinct for the University of Tasmania...”

– Tasmanian Senators Bilyk, Brown, Colbeck, Duniam, Lambie, McKim, Polley, Tyrrell and Whish-Wilson

“
UTAS is one of the best universities in the country – and with ambitious plans to improve their facilities and offering to students – we need to get behind it.”

– Tasmanian Labor Leader Dean Winter

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The estimated \$500 million project, which will create more than 3000 jobs during and after construction - and enable further jobs into the future, will transform our city.”

– Property Council of Australia, Tasmanian Division President, Heather Mason

References

1. Decline in pre-tertiary STEM subjects taken in Tas since 2018. TASC Course Scaling Data, 2018 – 23
- 2,3. Deloitte and ACS 2023 Report: Australia’s Digital Pulse, Tasmania edition.
4. General methodology based on similar National modelling in “Engineering a Better Future” – The Insight Centre, 2023.
5. ABS Census 2021. STEM Overall qualifications in broad Fields of Education 01, 02, 03 & 05.