UNIVERSITY of TASMANIA

Summary of proposal to build a **Science and Technology Precinct in the Hobart CBD**

Artist's impression – an iconic science and technology infrastructure development on the university-owned site between Elizabeth, Melville, Argyle and Bathurst streets, Hobart.

The Project

The University of Tasmania is proposing an iconic $400 million Science and Technology Precinct on University-owned land in the Hobart CBD. The proposed 48,500 m² Precinct would house more than 3,000 students and 700 staff, with student numbers increasing by a further 1,500 over eight years.

Facilities will be designed for use by a range of disciplines that will move from Sandy Bay and be co-located, including: maths; physics; earth sciences; chemistry; engineering; information and communications technology; geography; and agricultural science. The University will seek to embed industry partners within the complex.

The proposal has been shortlisted as a priority initiative by both Infrastructure Australia and Regional Development Australia Tasmania. The University is seeking $250 million in Federal Government funding. Support is also being sought from the State Government.

Rationale

There is a growing, community-wide recognition that the future prosperity of the State must be founded on investment in people; a future based on innovation, new knowledge and a skilled workforce with the ability to use knowledge in creative ways. The STEM disciplines are key to unlocking the innovation potential of Tasmania. It is, however, the interface between STEM and other disciplines that will provide a sustainable base for innovation to propel economic growth in Tasmania. Scientific and technological innovation is critical to future-proofing established and growing industries.

The University's strategic relocation of key facilities into the CBDs of Hobart, Burnie and Launceston is putting education at the centre of social and economic life. We are already realising the benefits of this in the Hobart CBD. However, despite its reputation as one of the leading Australian universities in STEM, facilities at the suburban Sandy Bay campus are no longer fit for purpose. Moreover, facilities, staff and students are distributed across a number of buildings which inhibits collaboration.

The landmark proposal underpins the revitalisation of Hobart as a productive, accessible and liveable city that spearheads the State economy. The University precincts in the Hobart CBD complement new precincts in Burnie and Launceston, designed to revitalise the city centres and drive economic renewal across the State. The Hobart Science and Technology Precinct offers the opportunity to partner with the Australian Government to pilot a model of innovation-led urban renewal for the nation that may be relevant in many other Australian cities, particularly regional cities.

Estimated economic impact

The Precinct will generate significant economic benefit for Hobart, Tasmania and for Australia. The projected economic impact, which includes an increase in students, staff, research activities and construction, is $3.3 billion nationally (including $2.7 billion in Tasmania) over a 30-year period.

The estimated increase to GDP is $2.3 billion and estimated increase to Tasmania's GSP is $1.5 billion. The 775 jobs supporting the construction period would reduce the State's unemployment level by 0.3%, while 100 ongoing academic and support jobs would contribute to Hobart's scientific and technological human capital.

Key facts and figures:

- $400m development
- To house 3,000 students and 700 staff, plus 1,500 new students over eight years
- $3.3 billion economic impact nationally over 30 years, including $2.7 billion in Tasmania
- $2.3 billion increase to GDP and $1.5 billion increase to GSP
- 775 jobs during construction, equivalent to 0.3% reduction in State unemployment
- 100 additional academic and support jobs

Further information

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Support for new and existing industries

The opportunities for economic renewal are extensive, particularly at the interface between STEM and the other University CBD precincts. The intersection of STEM with the Medical and Health Science Precinct creates opportunities in biotechnology, medical devices, smart foods and health services. Combined with the creative industries, STEM offers opportunities in additive manufacturing, new media, smart design and gamification.

In the Marine and Antarctic sector, the interface with STEM could provide the impetus for logistics, biosecurity and defence-related industries. The physical alignment of STEM with the Enterprize Tasmania Innovation Hub, co-founded by the University with the Tasmanian Government, supports commercialisation of intellectual property.

Social impacts

The social impacts would also be considerable through civic and urban rejuvenation, increased participation in higher education, population growth and greater cultural diversity. Colocation with central transport hubs will improve access for students from suburbs with traditionally low participation rates in education. Environmental impacts will be reduced through an anticipated increase in public or active transport use by staff and students.

UNIVERSITY *of* TASMANIA

CRICOS Provider Code (University of Tasmania): 00586B

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Proposal for relocation of UTAS' STEM Facilities to Hobart (If raised)

10. The 'Relocation of University of Tasmania STEM Facilities to Hobart CBD' has been included as an 'initiative' on Infrastructure Australia's May 2016 Infrastructure Priority List (IPL) following an initial assessment in February 2016. UTAS has provided the department with its written submission to Infrastructure Australia (Attachment D - Commercial-in-Confidence).

11. The initiative is aimed at stimulating economic growth and productivity in Tasmania in the near term. It includes relocation of the University's Science, Technology, Engineering and Mathematics (STEM) facilities to a new 23,000 square metre precinct located in the centre of the Hobart CBD. The University intends to expand its STEM facilities with an extra 200 academic staff, 300 post-doctoral staff and 200 PhD students which will enable the teaching of an extra 4,000 students.

12. Infrastructure Australia has advised that to become a formal proposal for funding, the proponent must submit a business case, which the UTAS has not yet done. UTAS has advised that it proposes to submit its business case in the next two to three weeks. The department has agreed to assist UTAS to progress its proposal for the STEM precinct with Infrastructure Australia.

13. UTAS has advised that the proposal has yet to be fully costed but is estimated to cost $400 million. It is proposing the Commonwealth contribute $250 million and the remaining $150 million to be shared between UTAS and the Tasmanian Government (note that costings are preliminary and confidential).

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TOPICAL ISSUES BRIEF
DENISON

HOBART SCIENCE AND TECHNOLOGY PRECINCT

The University of Tasmania (UTas) is seeking Commonwealth funding for its proposal to move its science, technology, engineering (STEM) facilities from Sandy Bay to Hobart.

KEY POINTS:

- On 17 February 2017, Infrastructure Australia (IA) listed the business case for the 'Relocation of University of Tasmania STEM Facilities to Hobart Central Business District (CBD)' project on its Infrastructure Priority List.
- The proposal seeks to stimulate economic growth and productivity through the relocation and expansion of UTas' STEM facilities which will support 200 academic staff, 300 post-doctoral staff, 200 PhD students and an additional 4,000 students.
- UTas estimates the project will cost $400 million and is seeking a $250 million contribution from the Australian Government with the remaining $150 million to be provided by UTAS and the Tasmanian Government.
- Mr Andrew Wilkie MP, Independent Member for Denison, has been lobbying the Government to support UTas' STEM proposal.
- While the Government is supportive, its $150 million Jobs and Growth in Tasmania commitment is a priority.

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s 22 Contact Officer: s 22

Phone number: s 22

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Minister for Education and Training

QTB No: QB17-000159
Last Updated by Department: 08 August 2017
Last Updated by Adviser: 08 August 2016

Hobart STEM Centre

QUESTION

Does the Australian Government support the $400 million Hobart STEM relocation project?

OUR POLICY

- The Government is aware of the University of Tasmania (UTas) proposal to relocate its science, technology, engineering and mathematics (STEM) facilities to the Hobart Central Business District (CBD).
- The Government provides ongoing support for higher education to boost opportunities for jobs and growth in the Tasmanian economy.
- This includes a commitment of $150 million to UTas for the expansion and relocation of its campuses in Burnie and Launceston.
- The Government supports Tasmania's future economic prosperity through a range of initiatives including the Cities Deals and Building Better Regions Fund.
- The Government has already signed a city deal for Launceston and the process for selecting future deals will be announced shortly.
- Through the Building Better Regions Fund, the Government will support four projects in Tasmania providing over $11 million to assist with vital infrastructure in locations such as Bridgewater and Kingston.
- In 2015, the Australian Government provided approximately $406 million in financial assistance to UTas, through programs such as the Commonwealth Grants Scheme, National Institutes Funding and the Australian Maths and Science Partnerships Program[1]. This represents a 32 per cent increase from the $305 million in Australian Government financial assistance provided to UTas in 2009[2].

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[1] University of Tasmania, 2016, *University of Tasmania Annual Report 2016,* retrieved 8 August 2017 from: http://www.utas.edu.au/__data/assets/pdf_file/0004/887278/Annual-Report-2015.pdf

[2] University of Tasmania, 2010, *University of Tasmania Annual Report 2009*, retrieved 8 August 2017 from: http://www.utas.edu.au/__data/assets/pdf_file/0018/50229/UTAS_AnnRep09.pdf

Contact Officer: s 22
Telephone:

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Page 2 of 3
Minister for Education and Training

QTB No: QB17-000159
Last Updated by Department: 08 August 2017
Last Updated by Adviser: 08 August 2016

POTENTIAL HOT ISSUES

- Since listing of the Hobart STEM Centre proposal by Infrastructure Australia (IA) on its Infrastructure Priority List, the Tasmanian Government and UTas have been campaigning strongly for a $250 million funding contribution from the Government. However, IA listing does not commit the Government to funding the project.

- The Tasmanian Government is keen to sign a City Deal for Hobart and have indicated that the STEM Centre would be a key component of any City deal discussion. The remaining $150 million would be provided by UTas and the Tasmanian Government.

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Minister for Education and Training
QTB No: QB17-000159
Last Updated by Department: 08 August 2017
Last Updated by Adviser: 08 August 2016

BACKGROUND

UTas Hobart STEM Centre

- On 18 July 2017, Professor Peter Rathjen, Vice-Chancellor of the University of Tasmania (UTas), wrote to Minister Birmingham concerning a proposal for a 'Tasmania Innovation Network' (TasNet) which will connect science, technology, engineering and mathematics (STEM) nodes in Burnie and Launceston with UTas's $400 million 'Hobart STEM Centre' proposal, to create a new 'Hobart Innovation Precinct'. The letter included a report from Australian consulting firm, Nous Group, supporting the proposal.

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Contact Officer:
Telephone:

Date QTB Created: **29 August 2017**

Australian Government
Department of Education and Training

Ministerial

Reply level **Minister for Education and Training**
Subject **VIP | University of Tasmania STEM Centre**

Summary of issues

- On 18 July 2017, Professor Peter Rathjen, Vice-Chancellor of the University of Tasmania (UTas), wrote to you concerning a proposal for a 'Tasmania Innovation Network' (TasNet) which will connect science, technology, engineering and mathematics (STEM) nodes in Burnie and Launceston with UTas's $400 million 'Hobart STEM Centre' proposal, to create a new 'Hobart Innovation Precinct'. The letter included a report from the Nous Group supporting the proposal.
- Since listing of the Hobart STEM Centre proposal by Infrastructure Australia (IA) on its Infrastructure Priority List, the Tasmanian Government and UTas have been campaigning strongly for a $250 million funding contribution from the Australian Government indicating that the centre would be a key component of any City deal discussion. The remaining $150 million would be provided by UTas and the Tasmanian Government.
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Senator the Hon Simon Birmingham

Minister for Education and Training
Senator for South Australia

Our Ref MC17-005306

Professor Peter Rathjen
Vice-Chancellor and President
University of Tasmania
Private Bag 51
HOBART TAS 7001

Dear Professor Rathjen

Thank you for your letter of 18 July 2017, concerning the University of Tasmania's proposed Hobart Science, Technology, Engineering and Mathematics Centre and for providing the Nous Group report '*Tasmanian Innovation Network - the Hobart Precinct*'.

I acknowledge your commitment to driving regionally-transformative opportunities that seek to energise communities across the state. I am keen to see the Commonwealth's $150 million 'Jobs and Growth in Tasmania' initiative progress, so that it can deliver the anticipated benefits to the communities of Launceston and Burnie.

This initiative and others, including the Launceston City Deal and Building Better Regions Fund, provide $11 million to assist with vital infrastructure in locations such as Bridgewater and Kingston. This demonstrates the Commonwealth's commitment to supporting Tasmania's future economic and social prosperity.

I appreciate you keeping me apprised of developments.

I have copied this letter to the Hon Angus Taylor MP, Assistant Minister for Cities and Digital Transformation.

Yours sincerely

Simon Birmingham

cc. Hon Angus Taylor MP, Assistant Minister for Cities and Digital Transformation.

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UNIVERSITY of TASMANIA

OFFICE OF THE VICE-CHANCELLOR

Senator the Hon Simon Birmingham
Minister for Education and Training
107 Sir Donald Bradman Drive
HILTON SA 5033

Dear Minister

As you are aware, Infrastructure Australia (IA) approved the business case for the University of Tasmania's proposed Science and Technology (STEM) Centre for Hobart in February this year. I am pleased to provide you with a copy of a report from Australian management consulting firm, Nous Group, which has been undertaken since Infrastructure Australia assessed it as a "priority project" under its national infrastructure program, noting at the time the project's significance for Hobart, Tasmania and the nation. It is Tasmania's only project on the national priority list and the only education project ever to receive recommendation for funding in this way. Nous has assessed the potential of a Tasmanian Innovation Network (TasNET) with the STEM Centre as its heart to act as a catalyst for growth and innovation in the State.

TasNET will connect STEM nodes in Burnie and Launceston with the STEM Centre in the Hobart Innovation Precinct, enhancing the education-led revitalisation of the Hobart CBD and those of Launceston and Burnie. The Nous report outlines national and international examples of how similar communities have transitioned to innovation-based economies underpinned by new and existing industries and sectors through strategic investment and partnership with government, industry and universities. Based on these comparative national and international exemplars, TasNET has the potential to create jobs and drive innovation for Tasmania's regions while delivering increased investment and improved productivity. For instance, in addition to the direct benefits, the $600 million University of Wollongong Innovation Campus has delivered 140 jobs in 65 start ups with 1500 more expected to be created by 2020.

At the time of its listing in February this year, Infrastructure Australia noted the project would boost the State's economy and demonstrate the major benefits that result from strategic infrastructure investment. The University strongly believes the proposed Tasmanian Innovation Network will establish Hobart as an innovation centre for the State, while aligning with the strategic intent of the Northern Transformation project underway and delivering concomitant benefits to Launceston and Burnie. We are continuing discussions with representatives of both the State and Federal Governments to determine an approach to funding.

I would be pleased to talk to you further about this proposal at your convenience.

Yours sincerely

s 47F

Professor Peter Rathjen
Vice-Chancellor

18 July 2017

4 AUG 2017

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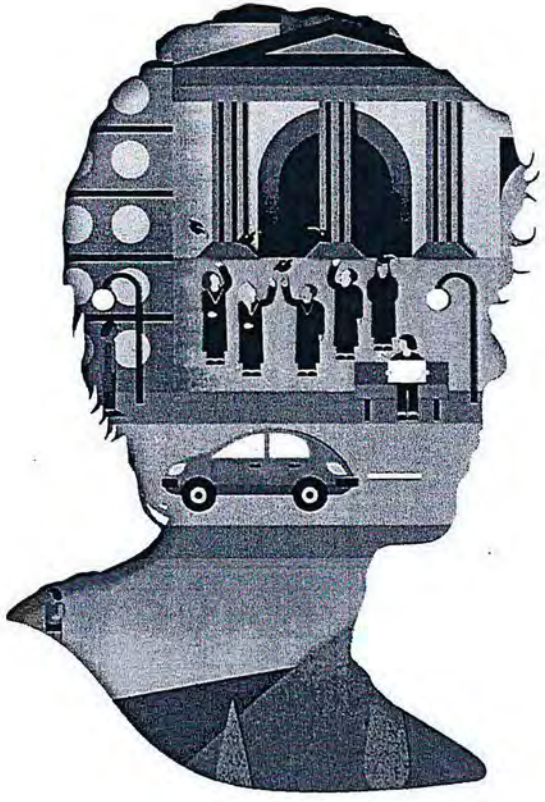


Tasmanian Innovation Network - the Hobart Precinct

Global lessons in innovation

May 2017

nous group

Tasmanian Innovation Network - TasNET

- Tasmania can build the capabilities of its workforce and connect industries and researchers in new ways that will drive innovation and economic growth across the State. The University of Tasmania (UTAS) is a catalyst for growth and innovation in the State.
- Governments and universities globally have successfully invested in science and innovation networks and precincts to stimulate economic growth and jobs, and to revive and revitalise local communities – particularly after prolonged periods of economic distress.
- The *Tasmanian Innovation Network (TasNET)* will connect science, technology, engineering and mathematics (STEM) nodes in Burnie and Launceston with a central *Hobart Innovation Precinct* hub.
- Provided the right level of investment and collaboration is achieved, *TasNet* has the potential to produce benefits analogous to those achieved in the following international examples, both to the economy and thus revitalising local communities.

✓ Create more jobs for Tasmanians

University of Wollongong Innovation campus:
$600m campus has created 140 jobs in 65 start-ups, almost half with female co-founders, and estimate an additional 1500 jobs by 2020.

✓ Drive innovation, generating employment and growth

Waterloo Innovation District in Canada:
University central part of innovation precinct. Government invested $110m in fund, leveraged across ecosystem. Every $1 to university returned $8.80 to economy, 20,000 jobs and regional economic impact of $2.614bn.

✓ Deliver investment in the regions

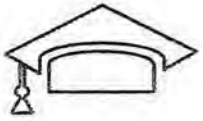
The Akron Biomedical Corridor in Ohio, USA:
University of Akron at centre of process, which has attracted $1.1bn in investment, $369m to medical imaging and infrastructure. Ohio now a global leader in polymer and chemical, 1300 firms employing 88,000 and 34% growth in biomedical industry since 2002

✓ Improve regional productivity

The Brainport technology precinct in Eindhoven, the Netherlands:
Is now one of three cornerstones of Dutch economy, that has delivered 3.3% growth in labour productivity, compared to 2% for Nederlands (2015) & where every Euro of private investment produces 2.30 Euro in GRP

Many of Tasmania's traditional industries are shrinking.

This is increasing the social and economic pressures on communities across the state. Tasmania continues to perform poorly across key national indicators:



- Lowest proportion of people with a bachelor's degree
- Lowest average levels of scientific and mathematical literacy in the country

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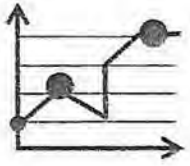
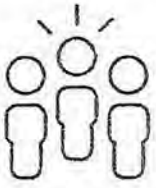


- Industries that are almost 20% less productive than the national economy
- Unemployment rate almost 1% higher than the national average
- Lowest weekly full-time wages in the country



- One in four people below or very close to the poverty line
- Lowest population growth rate in Australia

UTAS can play a central role in arresting this decline by facilitating the growth of a ***Tasmanian Innovation Network***.

The *Tasmanian Innovation Network will be a partnership between UTAS,* government, industries and communities across Tasmania. Over the next ten years it will aim to:

Revitalise communities

- Support efforts to revitalise Tasmania's CBDs and communities across the state
- Attract talent and research investment from inter-state and overseas
- Open up new education opportunities in regional areas

Deliver economic benefit and build capabilities

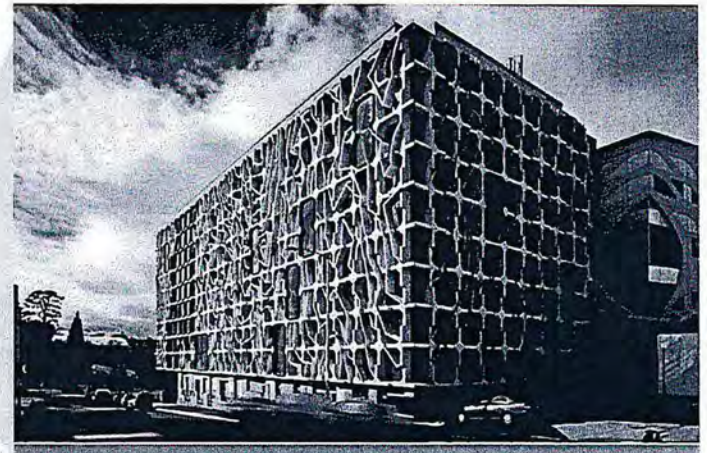
- Increase the number of Tasmanians graduating from university
- Increase the industry relevance of UTAS' course offers
- Provide more work-integrated learning opportunities for students

Facilitate innovation

- Work with existing Tasmanian business to be more innovative
- Support businesses in new and emerging industries to grow and succeed
- Instil an entrepreneurial mindset in Tasmanians

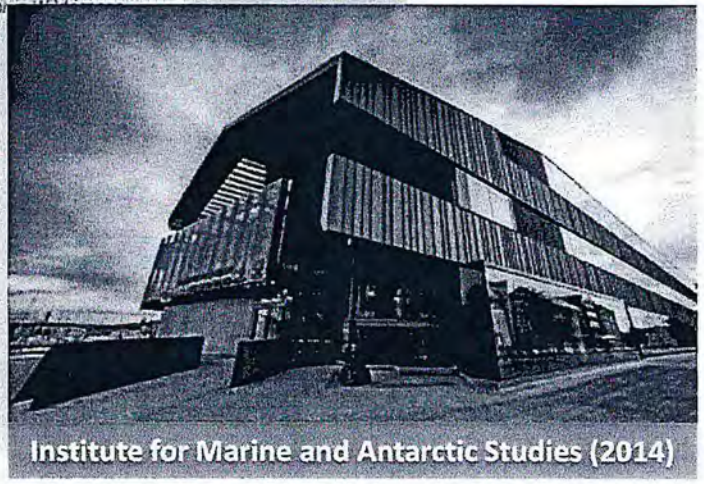
The STEM proposal can create a new ***Hobart Innovation Precinct*** that will drive the ***Tasmanian Innovation Network*** for state-wide benefit

Creative Exchange Institute (2019)

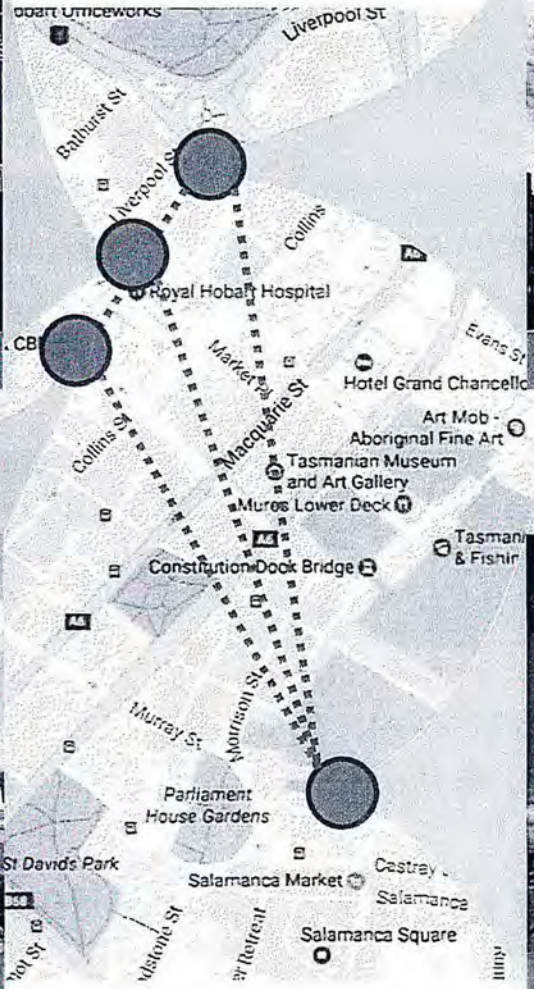


Medical Science 2 (2013)

STEM Centre (proposed)



Institute for Marine and Antarctic Studies (2014)



The ***Hobart Innovation Precinct*** builds on the successes and lessons of other precincts nationally and overseas.

Research identifies that successful precincts have the following characteristics:

- **Governance partnership** comprising government, industry and university, with a clear vision
- **Local capability** relevant to the industry cluster
- **Collaborative culture** that values inclusivity, openness and entrepreneurship
- **Available capital** for investment, including venture capital
- **Shared spaces** - facilities and infrastructure.

- Precincts have been used by governments around the world to stimulate economic growth and jobs.
- A precinct, also known as a 'hub' or 'cluster', is a geographical concentration of interconnected entities (business, education, research) that collaborate to stimulate innovation.
- University-led precinct strategies are appealing in that they drive research – the raw material of new ideas, innovations and 'start-ups'.
- Targeted investments, like well-positioned connective infrastructure, can be enough to generate exponential growth in cluster activity, delivering measurable and sustained economic returns.

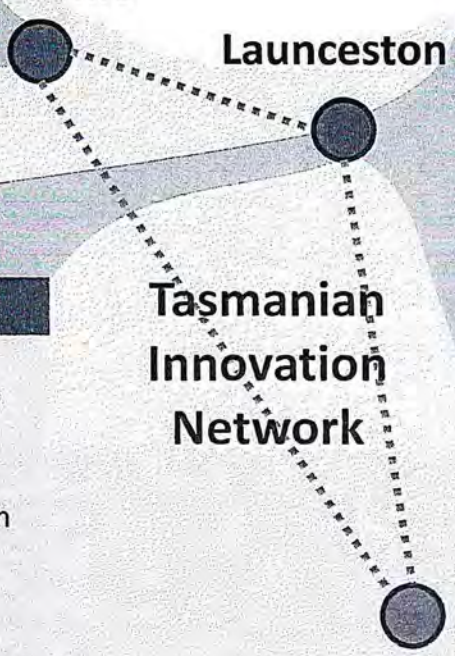
The ***Hobart Innovation Precinct*** will connect with proposed nodes to form the ***Tasmanian Innovation Network***.

West Park Agriculture Node

- $10m investment in new technologies, facilities and equipment for the Tasmanian Institute of Agriculture
- Will work closely with local industry, enabling focused effort in NW on Precision Agriculture and Advanced Manufacturing
- Specialised labs and equipment to support state-wide Bachelor degrees in Science and Health

Newnham Defence Innovation and Design Precinct

- Designed to leverage the region's existing defence infrastructure and manufacturing capabilities, and to foster R&D collaborations and knowledge transfer
- Will host high-tech businesses to facilitate access to specialist facilities and expertise within the Australian Maritime College and the technical division of the Institute for Marine and Antarctic Studies
- Will serve as a facility for expanding capacity in maritime simulation, the sustainment of the Australian fleet and for emergent autonomous underwater vehicle technologies



Inveresk Institute of Applied Science and Design

- $20m investment in specialised labs and equipment that will support new state-wide Bachelor degrees in Science and Health
- Co-location of industry and government with UTAS to drive solutions to local problems and engage students through work-integrated learning
- Focus on key sectors such as Defence, Food Technology, Wood Science, Sensing Technology and Physical Health

The proposed ***STEM Centre*** will fill a critical gap within the ***Hobart Innovation Precinct***.

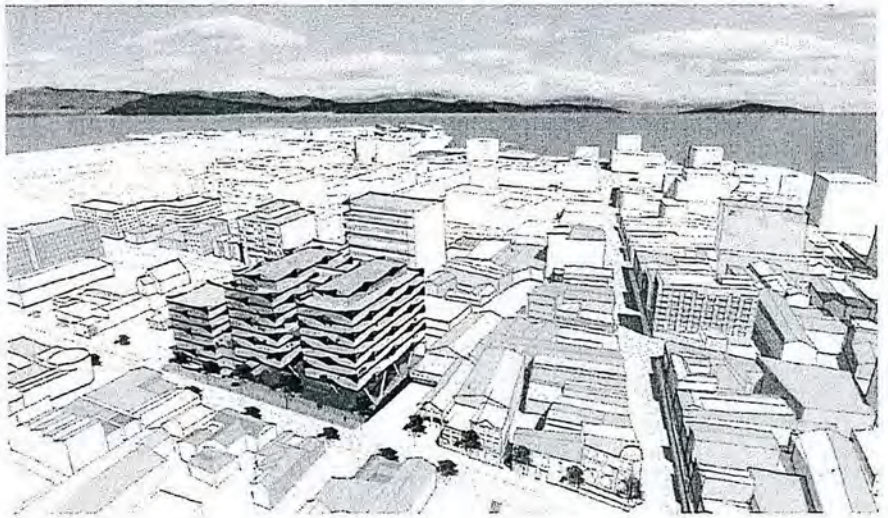
40,000m^2 of new world-class teaching and research facilities

Space for more than 3,000 students and 700 staff

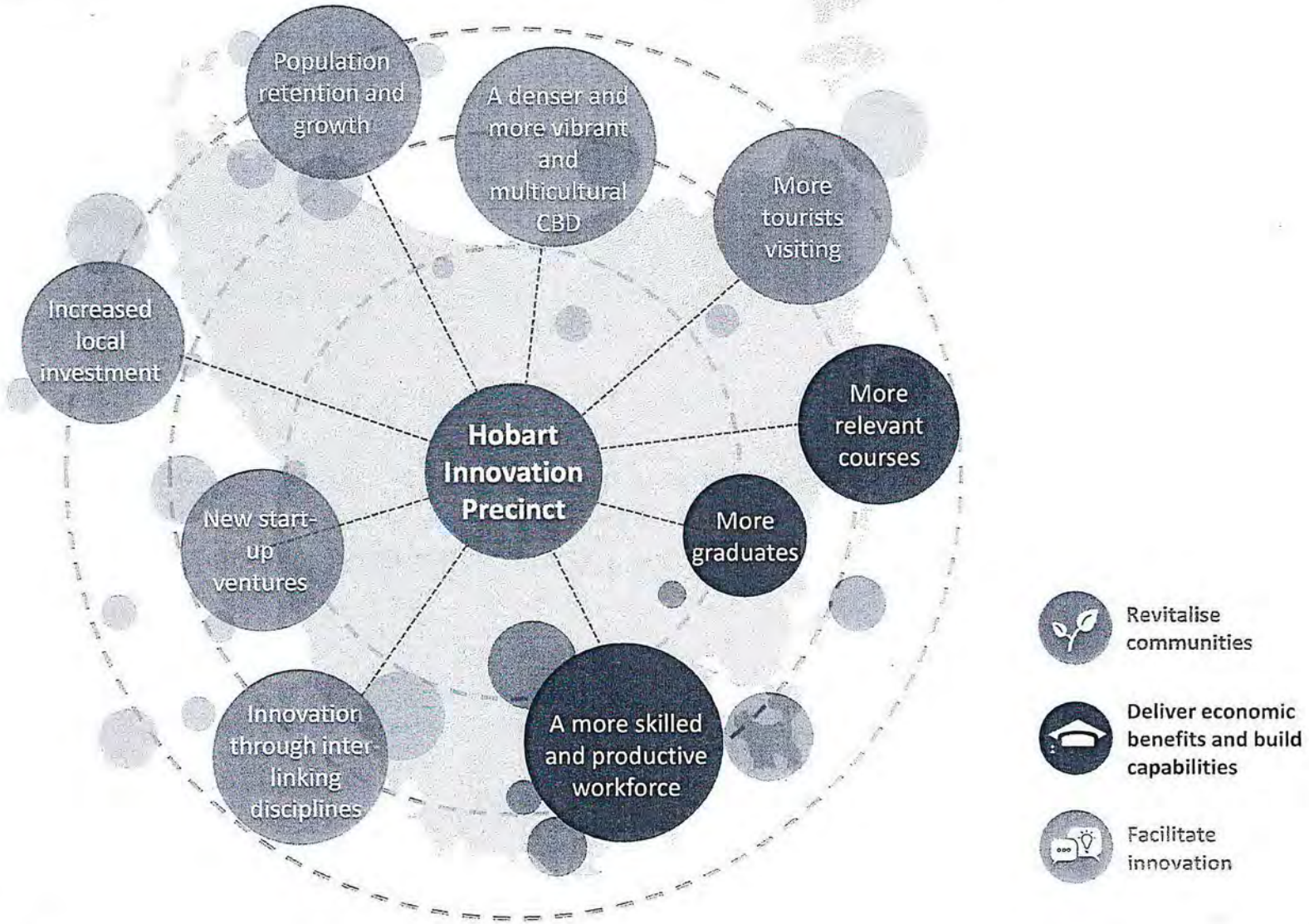
Design and landscaping that will encourage and facilitate community participation

Co-location of STEM schools currently housed in standalone and ageing Sandy Bay facilities

Designed to underpin expansion of STEM-related innovation and education in North and North-West



The ***Hobart Innovation Precinct*** is designed to generate benefits that will progressively ripple across the state, drive economic growth and build capabilities.



The Hobart Innovation Precinct will drive the ***revitalisation*** of cities across Tasmania.

Short-term → **Medium-term** → **Longer-term**

- Create jobs during construction, reducing Tasmania's unemployment
- Create new permanent long-term jobs for teaching and research academic staff plus additional support jobs
- Make it easier for students to work part-time in the CBD whilst studying
- Create commercial opportunities for local businesses in retail, accommodation and hospitality

- Transform previously stagnant parts of the CBD into a vibrant hub for students
- Build a critical mass of research and teaching excellence
- Make the CBD more lively and culturally diverse by bringing more local and international students into the city to study, work and play

- Create new employment opportunities
- Encourage graduates to stay and work in the city
- Encourage locals who would have otherwise left Tasmania to remain
- Contribute to the longer term revitalisation of the city
- Boost tourism to Tasmania by the friends and families of international students.

Other precincts have ***revitalised*** their local communities through targeted investment in innovation and infrastructure.

	Lessons from the Akron Biomedical Corridor, USA	Lessons from 'Silicon Docks' in Dublin
Overview	• The Akron Biomedical Corridor covers 205 hectares of downtown Akron. It connects The University of Akron with three major hospitals and the Northeast Ohio Medical University, and encompasses the Austen BioInnovation Institute of Akron.	• Grand Canal Dock in Dublin was substantially redeveloped in the 2000s by the Irish Government. Investment was made in converting 73,000m^2 into office and residential space.
Benefits	• Former 'rustbelt' infrastructure has been redeveloped and renewed (e.g. the original Quaker Oats factory in downtown Akron has been converted for student and university use). • On a smaller scale, shipping containers have been transformed into an education hub under the Akron Sustainer project. • A broad base of quality amenities, including healthcare, education and parkland, coupled with a comparatively lower cost of living, earnt Akron a USA City Liveability Award.	• Once a symbol of economic decline, a derelict and heavily contaminated gas site, Dublin's Docklands are today a symbol of rejuvenation and adaptation. • The Docks is the European HQ for almost all major tech firms, including Google, Facebook, TripAdvisor, Ebay and Airbnb. • Dublin is host to Europe's largest tech conferences, 'F.ounders' and 'Web Summit'. • The precinct has created an infectious and inspiring mentality of "yes we can" in the capital that had long been absent.
Key ingredients	• Billions of USD in investment through the Ohio Investment Program in infrastructure and facilities • Venture funding of start-ups which incentivises companies to remain in Akron • Urban renewal, including creating 'live, work, stay and play' facilities in downtown Akron • Conversion of iconic industry infrastructure	• Close proximity to the US and Europe • Favourable corporate tax regimes and government-backed venture capital investment • Fast-track planning schemes by the Dublin City Council • Access to a young and well educated European workforce • Presence of international technology firms giving indigenous start-ups opportunities, resources and experience

The ***STEM Centre*** will drive economic growth by increasing the capabilities of Tasmania's workforce.

Short-term → **Medium-term** → **Longer-term** →

- Inspire more young people to engage with science by creating highly visible interactive spaces and galleries that showcase discovery, creativity and innovation
- Make it easier for students from Hobart's northern and eastern suburbs to attend university by reducing their commute times
- Increase the visibility and accessibility of universities

- Enrol 140+ additional students p.a. in STEM in Tasmania
- Create more graduates with an entrepreneurial mindset and the skills to innovate

- Increase the skill levels and wages of Tasmania's workforce
- Increase the productivity levels and innovative capacity of Tasmanian businesses

Building STEM capabilities has driven economic growth through other precincts.

	Lessons from the Akron Biomedical Corridor, USA	Lessons from Brainport in the Netherlands
Overview	• Established in 2006, the Akron Biomedical Corridor in Ohio harnesses engineering capability to meet the healthcare industry needs of the future.	• Brainport was established as a technology precinct in 2010 to arrest the 'braindrain' and economic decline following the re-organisation of Phillips in the 1990s.
Benefits	• The former 'rustbelt' has become a 'brainbelt' • The University of Akron's polymers academic program is now the largest program in the USA • National and international healthcare expertise and entrepreneurs have moved to Akron • 35,000+ people employed in 400 polymer-related businesses - more than the major tyre companies at their peak • The number of people working in healthcare and bioscience sectors has doubled since 2004 to reach 230,000 in 2016.	• Brainport has become one of Europe's leading high-tech centres, with specialisations in mechatronics, robotics and advanced materials • The percentage of those with a higher education qualification in Brainport is rising faster than the national average, with more than a third of the working population having received a higher education.
Key ingredients	• Substantial existing engineering and scientific capabilities • Close proximity of major industry (hospitals) • Places and spaces within the Corridor that bring people together	• Existing local capability • Tight, collaborative leadership of the precinct that guides strategic decisions on cluster investments • Construction of a series of purpose-built 'campuses' that act as laboratories for new ideas • Access to venture capital

The ***Hobart Innovation Precinct*** can facilitate innovation that will benefit all of Tasmania.

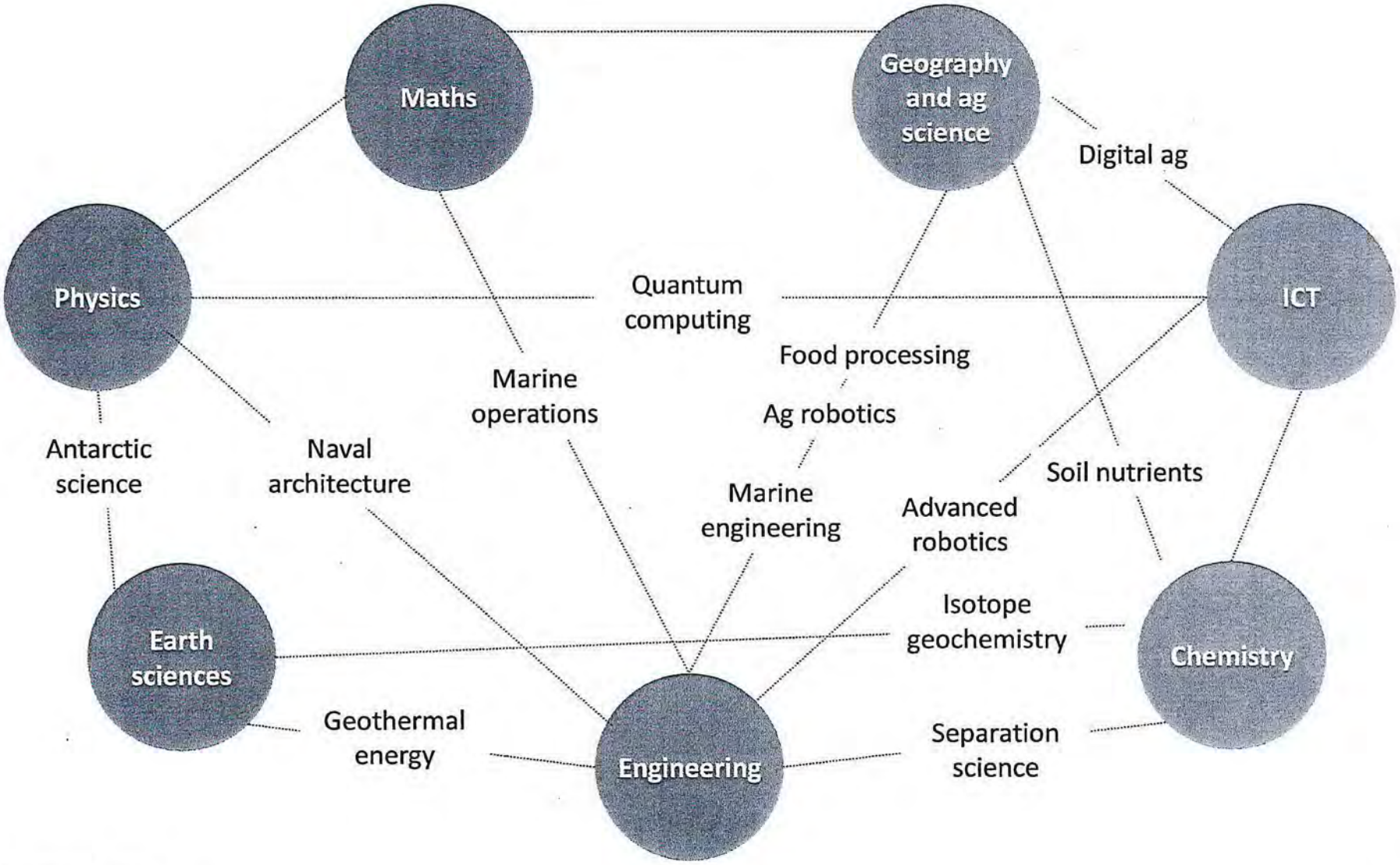
Short-term → **Medium-term** → **Longer-term**

- Bring together researchers working in different disciplines in one place to foster knowledge exchange
- Create spaces for scientists, students and industry to collaborate through exhibition spaces, galleries and studios

- Create new links between disciplines to open up new research and business opportunities in sectors that Tasmania is already strong in
- Increase research quality and output
- Increase collaboration with industry

- Grow the size of new and emerging industries in Tasmania
- Support existing Tasmanian businesses to create and adopt new ideas
- Create new jobs by attracting large enterprises to Tasmania

The ***STEM Centre*** will make it easier for UTAS' STEM faculties to engage in inter-disciplinary research.



Enhancing STEM capabilities and infrastructure will enable existing Tasmanian businesses to innovate.

Industry	Overview	STEM led growth opportunities
 **Forestry and forest products**	• Worth $1bn to Tasmania and 4.2% of Tasmania's international exports • Tasmanian woodchip exports increased by 76 per cent in 2016	• Growing interest in development of bio-chemicals, composite materials and bioenergy around the world • R&D opportunities around improved understanding of wood properties, resource characterisation, wood handling and processing, manufacturing systems and improved fit-for-purpose products, and information capture, storage and dissemination along the value chain
 **Aquaculture and fisheries**	• Australian aquaculture production was $1bn in 2012-13 - largely driven by growth in Tasmanian Atlantic salmon production • Most valuable seafood sector in Australia – total gross catch p.a. worth over $690m	• R&D in marine biosecurity, including anchoring a coordinated national response with key links to industry • Using modern molecular and genetic tools to combat infection, disease spread and pest infestation which threaten commercial aquaculture and fisheries • Exploring utility of ambient and ubiquitous technologies, autonomous devices and robotics in bio-surveillance and bio-prospecting

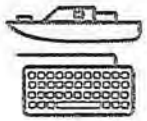
The ***STEM Centre*** will accelerate collaboration opportunities within the precinct related to *new* industries.

Maritime + STEM Centre

Autonomous underwater vehicles

- UTAS is a world leader in autonomous underwater vehicles (AUV) and currently has one of the largest AUV expertise bases in Australia
- Global AUV market estimated to be worth ~$350m by 2020
- New opportunities will arise from the increased usage and enhanced functionality of second and third generation AUVs which allow them to be used in new ways

Marine and Antarctic + STEM Centre



Marine simulation

- Increasing demand as costs of 'live' training operations have escalated
- Latest Defence White Paper signalled a growing demand for simulation and simulators

Medical and Health Sciences + STEM Centre

Functional foods

- Fortified/functional packaged food is valued at $159bn globally in 2016
- Largest category in the health and wellness industry
- Global functional food market had compound annual growth rate of 6% in 2011-2015

The ***STEM Centre*** will accelerate collaboration opportunities within the precinct related to *new* industries.

Medical and Health Sciences + STEM Centre

Biotechnology

- Australian biotechnology industry is one of the largest in the world
- Demand for biotechnology R&D is rising as the population ages
- Tasmania is close to Melbourne which is home to approximately 180 biotech companies

Creative Industries + STEM Centre

Video game development

- Strong growth in international demand
- 84 digital game developer businesses and industry value add of $71.6m across Australia in 2011
- 800+ people employed across Australia in 2012

Additive manufacturing

- The global additive manufacturing industry grew by 25.9% to $5.17 billion in 2015
- In 2016, 29.6% of the global 3D printing market was for rapid automative design prototyping
- Improving manufacturing competitiveness would enable Australia to capture a 25–35% increase in value added by 2026

The flow on benefits of increased innovation can be profound.

	Lessons from the University of Wollongong's Innovation Campus	Lessons from the Waterloo Innovation District, Canada
Overview	• The University of Wollongong's Innovation Campus provides infrastructure, mentoring and education programs, including iAccelerate, to incubate and grow ideas and help to connect local entrepreneurs with funding opportunities.	• The Waterloo Innovation District, established from 1997, links the University of Waterloo's engineering and entrepreneurship focus with a number of government and business high-tech innovation initiatives, including Communitech.
Benefits	• Between 2012 and 2016 iAccelerate: supported 65 start-ups, which created 143 new jobs; enabled nine companies to launch new products; and helped six companies establish an international presence. • 47% of start-ups have had female cofounders, a particular objective of the Innovation Campus. • Program successes helped secure funding for a purpose-built business incubator and accelerator – the iAccelerate Centre.	• High-tech activity in the Waterloo District has increased substantially over the last decade, with the city ranked #2 behind Silicon Valley, across a range of innovation-related metrics, such as start-up density. • There are 1,000+ tech start-ups registered in the city at any point in time and 631 patents per million residents (behind only Stanford and Silicon Valley). • The University of Waterloo has won 'Canada's most innovative university' for 24 years.
Key ingredients	• Concentration of businesses, researchers and students in a single location • The Advantage Wollongong partnership between the University, state and local governments.	• A clear vision and strong university leadership and investment • Higher education programs with a substantial workplace-based component and entrepreneurship experience, alongside the academic components • University policy that incentivises innovation by absorbing the risk while giving the student full ownership of their IP.

APPENDIX A – Detailed Case Studies

Precincts can deliver a range of diverse economic, social and environmental benefits.

There are examples around the world and in Australia of similar precincts which showcase the benefits that precincts can deliver over time.

	Case study	Overview	Location	Established
	**University of Wollongong Innovation Campus**	$600m research, innovation and commercial precinct North of UOW campus	Wollongong	2006
	**Akron Biomedical Corridor**	205ha 'corridor' connecting The University of Akron with three world-leading hospitals and the Northeast Ohio Medical University	Akron, Ohio	2006
	**Silicon Docks**	Hub of high-tech and born-on-the-internet firms at the Grand Canal Dock area	Dublin, Ireland	Early 2000s
	**Waterloo Innovation District**	Tech and start-up innovation district anchored around the University of Waterloo	Waterloo, Canada	Early 2000s
	**Brainport**	3,250ha technology precinct comprising research institutes and technology companies	Eindhoven, Netherlands	2010

University of Wollongong Innovation Campus

Summary

- The $600m Innovation Campus is a research, innovation and commercial precinct set on 33ha in North Wollongong, a short drive from the main University of Wollongong campus.
- The Innovation Campus aims to drive economic transformation of the Illawarra region by making it a destination for innovators and investors and by retaining the university's graduates. It was designed to encourage networks and interaction among like-minded entrepreneurs, mentors and advisers.
- University research entities, including the Intelligent Polymer Research Institute and the ARC Centre of Excellence for Electro-materials Science, are based at the Innovation Campus, along with a number of international and domestic companies.
- In 2011, UOW began running the iAccelerate program which provides infrastructure, mentoring and education programs to incubate and grow ideas and helps connect entrepreneurs with funding opportunities in the Illawarra region and beyond.
- In 2016, the iAccelerate Centre was opened – a purpose-built business incubator and accelerator with 'plug and go' expandable space for up to 280 entrepreneurs.
- Future focus at the Campus is planned in health and wellbeing, innovative manufacturing, sustainability, IT and finance.

Economic benefits

- The iAccelerate program has created 143 jobs to date and aims to create 500 direct and 1000 indirect jobs by 2020.

"...it gives us the opportunity to align with one of the most progressive schools of engineering and mining in the country, presenting opportunities for R&D as well as internships and scholarships"

Brad Neilson, Managing Director of Joy Australasia

"The coming period offers major opportunities for us to continue to evolve Wollongong from a steel city towards being a diverse, highly skilled and globally competitive 'university city"

Professor Paul Wellings, Vice Chancellor UOW

University of Wollongong Innovation Campus

Revitalisation

- Systems of satellite campuses have enabled stronger relationships between the university and local communities.
- The campus enables innovative companies to partner with the university for research and to access graduate employee pools.

Build capability

- UOW has the fourth largest IT student intake in Australia, producing half of all ICT graduates in NSW and one in every seven graduates nationally.
- The Innovation Campus employed approximately 1,500 people in 2016 and projects employment of 5,000 by 2025.

Facilitate innovation

- 65 start-ups supported by iAccelerate between 2012 and 2016 have generated 143 jobs.
- Nine companies launched new products between 2011 and 2016.
- Six companies expanded their international presence in 2015.
- With a focus on increasing opportunities for women, 47% of start-ups have had female cofounders.

Similarities with Hobart Innovation Precinct

- University-led with the involvement of government and some industry
- Shared Australian cultural, social, political and economic history, norms, policies and institutions
- Some economic and social indicators in common – employment, regional industry growth, average wages and living standards, educational attainment and productivity
- Similar population at 292,000
- Access to a relatively low level of venture capital
- The use of purpose-built physical spaces where people are likely to 'crash into each other'

Differences with Hobart Innovation Precinct

- Wollongong and the broader Illawarra region experienced significant industry success in coal mining and steel
- Single industry focus

Akron Biomedical Corridor, USA

From 'rustbelt' to 'brainbelt'

Summary

- Established in 2006 to encompass a 205ha area that arcs downtown Akron and connects The University of Akron with the campuses of three world-leading hospitals and the Northeast Ohio Medical University.
- The University of Akron played a central role in the Corridor development as a connector between public and private entities.
- The Corridor was intended to repurpose the deep knowledge base amongst scientists and engineers in the region from manufacturing tyres to manufacturing polymers for the future, particularly in healthcare.
- The Austen BioInnovation Institute of Akron was established within the Corridor and its mission is to "bring together the best minds and the most creative thinkers" to tackle health-care issues, by combining "entrepreneurial spirit with scientific innovation to achieve powerful results."
- The Akron BioInvestments Fund was created by the City of Akron to support the commercialisation of local and foreign biomedical research and start-up activity within the Corridor.

Economic benefits

- With the Biomedical Corridor established, the biomedicines and biomaterials industry has grown by 34% since 2003, with some 600+ biomedical businesses now in operation. This is one of the largest concentrations of polymer businesses in the world.
- Entities within the Corridor attracted $US1.1bn in new investment between 2005/06 and 2015/16.
- $US369m has been invested since 2002 in medical imaging companies and infrastructure.
- Boosted by polymer R&D in the Corridor, Ohio state is the largest producer of polymer and rubber products in the USA and the second-largest producer of plastics.
- Ohio is recognized as the global leader in the polymer and specialty-chemical industry, with about 1,300 companies that together employ over 88,000 people.

"People are more optimistic again. The sense that we can't compete with the Chinese is gone."

COO, business incubator

"The Institute is uniquely positioned to meld the region's traditional strengths in research, education and world-class health care."

William H. Considine, CEO of Akron Children's Hospital

Akron Biomedical Corridor, USA

Revitalise communities

- The city has gone from being the 'tyre capital of the world' to the 'polymer centre of the Americas'.

Build capability

- The University of Akron's polymers academic program is now the largest program in the USA.
- National and international healthcare expertise and entrepreneurs have moved to Akron.
- 35,000+ people employed in 400 polymer-related businesses - more than the major tyre companies at their peak.
- The number of people working in healthcare and bioscience sectors have doubled since 2004 to reach 230,000 in 2016.

Facilitate innovation

- Proximity of healthcare assets, cutting-edge technology and biomaterials science expertise has generated significant medical innovations and collaborations (e.g. paints that emit light, coatings that are self-healing, and contact-lens materials that change colour based on insulin levels).
- The University is transforming the auto, aerospace and defence industries through its work on advanced materials (e.g. high-temperature ceramics, composites and novel metal alloys).

Similarities with Hobart Innovation Precinct

- An initial catalyst for the cluster has been economic distress.
- The proposed 'Corridor' was driven by a university with government and industry involved in supporting and governing the cluster.
- Existing industry resources (human and capital) were the basis for the Corridor.

Differences with Hobart Innovation Precinct

- The Corridor is located within 500 miles of 42 major cities across North America, is between Chicago and New York and is served by multiple networks of domestic highways, rail services and air travel offering substantial access to expertise, markets and capital
- Substantial existing healthcare assets (3 major hospitals) and upfront commitment of industry
- Deep existing biomaterials science and engineering capability
- Access to venture capital financing for start-ups
- Historically, NE Ohio has experienced major industry successes (e.g. Goodyear and Quaker Oats).

Silicon Docks, Ireland

Summary

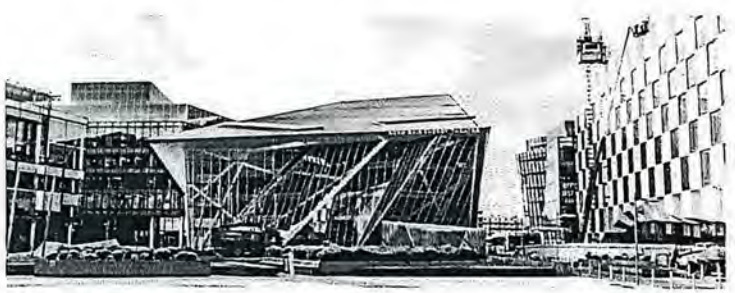
- 'Silicon Docks' is the nickname for the Grand Canal Dock area in Dublin, today a hub of high-tech and born-on-the-internet firms.
- The docks were substantially redeveloped starting in the early 2000s as part of the Irish Government's efforts to reverse a long period of industrial decline which had seen boatbuilding, rope making, glass manufacturing, flour milling and gas production activity leave the once thriving port.
- The Irish Government, through the Dublin Docklands Development Authority, invested in physical assets and infrastructure, revamping a contaminated gas site, to provide facilitates that Multi-National Companies could inhabit. At the same time, IDA Ireland, the agency responsible for attracting FDI, launched a major international campaign to market Dublin to the technology industry.
- The government also set up the Digital Hub organisation to provide tech-conducive office space, business support services and learning and training opportunities for local businesses.
- Dozens of colleges and universities, including Dublin City University, Trinity College, University College Dublin, and Dublin Institute of Technology, participate in and with the technology cluster, partnering with local and foreign firms.
- Enterprise Ireland's Competitive Start Fund invests in 15 seed-stage start-ups every quarter. There are other accelerators in the city offering start-ups seed funding, including Launchpad.

Economic benefits

- The internet sector is worth over €2 billion in wages and €1 billion in corporate taxation
- 48% of the 280,000 persons employed in Ireland's financial, ICT and professional services sectors are located in the Dublin region
- 94% of residents in Grand Canal Dock are in employment.

"Ten years ago, I had a very good business proposition, but I didn't have a community around me... Today, the support is significantly different. It means things can really happen, now, in Ireland."

Connor Murphy, co-founder Datahug



"We have a lot of good knowhow coming through our universities and we work closely with colleges and universities to ensure they're up to speed on where tech sectors are moving."

Barry O'Dowd, senior VP for emerging business at IDA

Silicon Docks, Ireland

Revitalise communities

- Once a symbol of economic decline, a derelict and heavily contaminated gas site, Dublin's Docklands are today a symbol of rejuvenation and adaptation.
- Dublin is the location of Europe's largest tech conferences 'F.ounders' and 'Web Summit', attracting influential names in the tech world.
- Some commentators have said the tech boom has created an infectious and inspiring mentality of "yes we can" in the capital that had long been absent.

Build capability

- The internet sector employs over 40,000 individuals directly and is forecast to create an additional 45,000 jobs by 2018.
- Partnerships between Irish education institutions and tech firms, who have brought international talent with them, have grown labour force capability.
- Almost one third of the Irish workforce is employed in STEM industries and over 30% of students enrol in STEM courses.

Facilitate innovation

- Dublin now has a reputation as a centre for high-tech innovation and start-ups, many of which are Irish.
- Sectors of Irish industry expansion include search, games, e-commerce, online payments, personal services and marketing.
- Hundreds of technology businesses have progressed through the Digital Hub, generating thousands of skilled jobs.

Similarities with Hobart Innovation Precinct

- An initial catalyst for the cluster has been economic distress
- The use of purpose-built physical spaces where people are likely to 'crash into each other'.

Differences with Hobart Innovation Precinct

- Positioned between two of the world's biggest economic zones – USA and Europe. The location enables favourable time-zone and travel, supported by a high-capacity airport
- A relatively young, very highly educated local population, plus access to European Labour
- Favourable corporate tax (12.5%) regime to attract companies
- Favourable urban development policies enabling fast-track planning and building
- Business and government has been heavily involved in driving and sustaining the cluster with less of a role played by universities
- History of major international technology firms (e.g. Apple, Microsoft and HP) in Ireland
- Substantial venture capital investment initiated by the Irish government (provided €320m equity capital between 1995 and 2015) for high-risk, high-growth companies.

Waterloo Innovation District, Canada

Summary

- In the early 2000s, the University of Waterloo led a group of local government, business, community and university representatives in a coordinated and cooperative effort to turn the economically struggling city of Waterloo around, helping it to transition to a high-tech industry centre.
- The University's efforts built on the establishment of Communitech in 1997, a hybrid economic development agency, marketing board and business support network.
- The University positioned itself as the 'nucleus' of the Waterloo Innovation District using its research functions to drive value-added discoveries. The university changed its approach, including an 'inventor-owned intellectual property' policy allowing students to keep the equity in their ideas. A Co-operative Education model involving work placements is applied to its courses and, entrepreneurship training is built into every program.
- In 2004, the government set up a $US110m fund for an economic-development program financed through a 1.2% property tax over a 10-year period. Funds went toward cleaning up industrial sites and transforming warehouses in Waterloo and neighbouring Kitchener.
- In 2008, the university created the Velocity program and Velocity Fund for students to experience entrepreneurship while studying.

Economic benefits

- Every $CAD1 given to the university generates $CAD8.80.
- The University of Waterloo's total economic impact was $2.614bn in 2013.
- GDP growth in the region is the highest in Canada and unemployment the lowest.
- The University of Waterloo claims a 98% employment rate within two years of graduation.
- Substantial venture capital has moved into the city.

"The region is an extraordinary hub for innovation and at the cutting edge of the global economy."

Justin Trudeau, Canadian Prime Minister

Waterloo Innovation District, Canada

Revitalise communities

- Communitech, a university initiative, runs frequent large-scale events around entrepreneurship and commercialisation which attract audiences from across North America
- University of Waterloo gets substantial funding from its Alumni, who feel inclined to give-back following the university's support for their 'ideas'
- Once nicknamed a 'giant cornfield', the city now hosts the world's second largest Octoberfest celebration.

Build capability

- Voted 'most intelligent city in the world' in 2007
- Reversed brain drain - 88% of University of Waterloo Accelerator program graduates stay in Waterloo
- A 2013 PWC survey attributes over 20,000 jobs to the region's innovation ecosystem
- In 2014, for its 35,000 students, the University of Waterloo filled 19,250 placements in 40 countries, including 3,374 work terms served in Waterloo.

Facilitate innovation

- Ranked #2 behind Silicon Valley as a hot-bed of tech-related activity and start-up density
- 1000+ tech start-ups are registered with Communitech at any one time
- Intellectually strong city with 631 patents/million, behind Stanford and Silicon Valley
- University of Waterloo has won 'Canada's most innovative university' for 24 years.

Similarities with Hobart Innovation Precinct

- An initial catalyst for the cluster has been economic distress within a somewhat geographically isolated region
- The proposed 'Innovation District' was driven by a university
- The use of purpose-built physical spaces where people are likely to 'crash into each other'.

Differences with Hobart Innovation Precinct

- Business has been heavily involved in driving and sustaining the cluster
- The University of Waterloo restructured its programs and altered policies in order to incentivise entrepreneurship and grow the entrepreneurial capability of graduates
- Access to venture capital financing for start-ups.

Brainport, Netherlands

'Europe's leading innovative top technology region'

Summary

- Brainport is a 3,250ha region in the Netherlands with Eindhoven at its centre.
- Established as a technology precinct in 2010 with the goal of reversing Eindhoven's economic decline following the bankruptcy of DAF and re-organisation of Philips in the 1990s which cost the region 36,000 jobs.
- The Brainport Foundation, with membership covering industry, research and government, sets the direction for the region.
- Brainport includes a number of campuses which act as laboratories for the commercialisation of new ideas. This includes the High Tech Campus, the Automotive Campus, and Food Tech Park Brainport. The High Tech Campus, for example, involves 150 companies and institutes, and around 10,000 researchers, developers and entrepreneurs working on developing future technologies and products. Companies involved include Phillips, IBM and Intel.
- Brainport hosts high-tech companies in critical enabling technologies, notably nano-electronics, photonics, advanced materials and advanced manufacturing systems. Key focal sectors are High-tech Systems and Materials, Automotive, LifeTech & Health, Food & Technology, and Design.

"Here in Eindhoven, we're the international hub for innovation... an investment in Brainport is an investment in the Netherlands."

Peter Wennink, CEO ASML

Economic benefits

- Brainport is one of three cornerstones of the Dutch economy, together with Rotterdam Seaport and Amsterdam Airport.
- In 2015, economic growth in Brainport was 3% compared to 2% for the Netherlands.
- Growth in labour productivity in Brainport was 3.3%, compared to a national average of 2.3% (2015).
- Every euro of private R&D generates €2.30 in GRP.
- Brainport companies derived 43% of their revenue from the sale of new products, making these companies more successful in innovation than their counterparts in cities like Amsterdam and Rotterdam.

Brainport, Netherlands

Revitalise communities

- Authorities considered the need to renew the image of Eindhoven and have retrofitted and converted many old industrial buildings for residential, R&D and cultural uses.
- For the five years to 2016, the domestic migration balance has risen. There is also an increasing number of foreigners coming to live in the region.

Build capability

- Brainport has become one of Europe's leading high-tech centres, with specialisations in mechatronics, robotics and advanced materials.
- The percentage of those with a higher education qualification continues to rise faster than the national average, with more than a third of the working population having received a higher education.

Facilitate innovation

Approximately 50% of the total Dutch R&D expenditure is spent within Eindhoven - Brainport is a significant contributor to this.

- Brainport has the highest patent density in Europe. It registers the major share of Dutch patents (44%), double that of European hubs like Stockholm and Munich.
- Netherlands is 'top 10' in the Global Innovation Index and 'top 5' in the Global Competitiveness Index, with Brainport the 'engine' for the national economy.

Similarities with Hobart Innovation Precinct

- An initial catalyst has been industry decline and economic distress
- The use of purpose-built physical spaces where people are likely to 'crash into each other'
- Brainport Precinct contains a number of industry 'campuses' supporting existing specialisms of the region.

Differences with Hobart Innovation Precinct

- Larger population base of 740,000 plus access to free movement of labour within the EU
- Geographically well connected and located in western Europe with access to large markets
- University/government/business partnership to govern and lead the precinct
- Strong existing base for competitiveness, innovation and productivity, as measured by global indices
- Access to venture capital financing for start-ups.

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Australian Government
Department of Education and Training

Meeting
For information

To **Minister for Education and Training**

Subject **Meeting with Assistant Minister Taylor regarding the University of Tasmania's Jobs and Growth commitment and relocation of STEM facilities in Hobart, Wednesday 25 October 5.00 pm**

Purpose To brief you for the meeting.

Urgency Please action prior to meeting.

Recommendation That you: **1. note** the information provided in this brief. s 47F Signature	1. **noted / please discuss** 25/10/2017
Comments s 22	
Contact Officer:	

Background

1. You have agreed to meet with the Hon Angus Taylor MP, Assistant Minister for Cities and Digital Transformation to discuss matters relating to University of Tasmania (UTAS) and major infrastructure proposals including the UTAS Hobart science, technology, engineering and mathematics (STEM) proposal.

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Hobart STEM Centre

12. On 18 July 2017 Professor Peter Rathjen, UTAS Vice-Chancellor wrote to you seeking funding of $250 million from the Government to support the relocation of the UTAS Faculty of Science, Engineering and Technology from the existing campus at Sandy Bay to a new purpose-built facility in the Hobart CBD. Brief MC17-005306 refers.

13. The proposed 'Tasmania Innovation Network' (TasNet) will connect STEM nodes in Burnie and Launceston with UTAS' $400 million 'Hobart STEM Centre' proposal, to create a new 'Hobart Innovation Precinct'. The proposal seeks to stimulate economic growth and productivity through the relocation and expansion of UTAS STEM facilities to support 200 academic staff, 300 post-doctoral staff, 200 PhD students and an additional 4,000 students.

14. The business case for the 'Relocation of University of Tasmania STEM Facilities to Hobart Central Business District (CBD)' was considered by the IA Board in February 2017 and subsequently listed on the AI Infrastructure Priority List (IPL). The IPL does not represent a Government commitment to any of the listed projects.

15. The Tasmanian Government has indicated that the STEM Centre would be a key component of any City deal discussion. Mr Andrew Wilkie MP, Independent Member for Denison, has been lobbying the Government to support UTAS STEM proposal. Economist, Mr Saul Eslake, gave support for the UTAS STEM proposal on 91.7 ABC radio broadcast on Monday 23 October 2017.

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16. On 21–22 September 2017, officials from PM&C discussed the potential Hobart STEM campus relocation with state and local officials and UTAS. Parties were advised that it was unlikely the Government would provide funding and that alternative financing options should be explored.

17. UTAS has met with the recently established Infrastructure and Project Financing Agency (IPFA), on possible financing options.

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From: s 22
Sent: Wednesday, 22 August 2018 11:51 AM
To: s 22
Cc:
Subject: FW: For clearance: Hobart City Deal - STEM focus area [DLM=For-Official-Use-Only]
Attachments: STEM-Key focus areas input to DIRDC.docx

Importance: High

For Official Use Only

Hi all,

Please find attached consolidated input to the Hobart Cities Deal - key focus areas document for your information. This draws on input from our colleagues across the Education and Training portfolio in Higher Education, Skills and Schools.

I note that there is cross portfolio interest in delivery of potential Government commitments under the Hobart City Deal, particularly in relation to supporting uptake of STEM through existing Government programs.

I will be attending a STEM Working Group teleconference on 29 August 2018 (TBC) which will settle advice to the Senior Officials Group on potential commitments under the City Deal, including financing options for the STEM campus relocation and supporting uptake of STEM through existing Government programs. s 47C
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I'll draw on the attached input at the meeting. Please let me know if your area would like me to raise or emphasise anything in particular at the meeting.

Kind regards

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Canberra City ACT 2601
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Ph: s 22
Email: s 22

Opportunity through learning

www.education.gov.au

STEM in the City

Facilitating the development of the University of Tasmania's STEM presence in the city

The University of Tasmania (UTas) is considering building a $400 million Science and Technology Precinct in the city on land it owns at the junction of Argyle and Melville Streets in the Hobart central business district. The Precinct would replace current facilities at the Sandy Bay campus that are fragmented and nearing the end of their usable life. In 2017, Infrastructure Australia listed the Precinct as a priority project due to the likelihood of the project generating benefits greater than expected costs (UTas assessed the net present value at $364 million, with a benefit-cost ratio of 1.95).

UTas is also considering its future at the existing Sandy Bay campus, given the majority of its campuses will be in the city if the STEM (science, technology, engineering and mathematics) campus relocates. With the potential to house 3000 students and 700 staff and a further 1500 (including 500 international) new students over eight years, relocating the remaining campuses will have major impacts on the Hobart city centre, particularly traffic and pedestrian flows and housing. The University Council is expected to make a decision on UTas future footprint in Southern Tasmania in September 2018.

The business case for the UTas Hobart Science and Technology Precinct anticipates that a proportion of students who will commence studies at the Precinct would not otherwise have attended university. The business case also provides analysis of barriers to higher education for school leavers and highlights UTas's development of associate degrees as an alternate educational pathway. This indicates that UTas may be looking to receive funding for additional sub-bachelor Commonwealth supported places (CSP). s 47C

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Objectives

Key objectives to be achieved from the project include:

- Creating a state-of-art STEM facility in Hobart that attracts uptake in the study of STEM subjects both domestically and internationally.
- Working with industry to create a skilled workforce for the jobs of the future and supporting an entrepreneurial and start-up culture to create STEM jobs.

- Improving the educational outcomes for Tasmanians by demonstrating the benefits of STEM study and making it easier for domestic students attend University.
- Improving the coordination between UTas and government to ensure any move into the city centre is well planned to maximise opportunities and minimise negative outcomes to the way the city functions.
- Ensuring the Sandy Bay campus is put to its highest and best use, should UTas vacate the site.
- Aligning government and university policy (for example, programs to support STEM jobs, women in STEM, STEM pathways etc).

Advice to Senior Officials Group

The table below provides the STEM working group's advice to Senior Officials consistent with Terms of Reference 1 and 2.

Term of Reference	Working Group advice
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1b. Funding and financing options including value uplift and capture opportunities.	UTas is currently in conversation with the Clean Energy Finance Corporation on financing options for the STEM campus relocation. [UTas –is there any further advice we can provide Senior Officials at this stage?] UTas' funding capacity is dependent on the timing and sequencing of any campus relocations. This, in turn, is dependent on a decision by the University Council on the location of UTas Southern campuses. If the University Council decides to consolidate UTas Southern campuses into the city centre, **we recommend** further work be undertaken to identify funding and financing options, including value uplift and capture opportunities.
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Potential actions

Through the Hobart City Deal, the following actions have been identified and will be prioritised.

These will be supported by the following key financing and funding initiatives:

- Exploring financing through the Clean Energy Finance Corporation

- <include as appropriate where there are headline funding commitments>

1. STEM in the City

Action	Funding required/allocated	Lead	Timeframe
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1. 2 Explore financing options with the Clean Energy Finance Corporation.		University of Tasmania and the Clean Energy Finance Corporation	Underway and contingent on University Council decision and timing for relocation
1. 3 Explore opportunities to use value capture to fund STEM facilities		University of Tasmania, Hobart City Council, Tasmanian Government and Australian Government (Infrastructure and Project Financing Agency)	To be undertaken at the same time as settling funding and financing
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Mission Based Compacts 2021-23 Meeting – University of Tasmania (UTas)
EC22-005031

Date: Friday 18 November 2022
Time: 11.00-12.30pm AEDT
Location: Via MS Teams

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UTas' financial position and future projections

- In 2022, UTas received $391.2 million in total Commonwealth funding (including Commonwealth Grant Scheme, Higher Education Loan Program and Research funding).
- s 47G

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Sensitivities

Campus Relocation

- In 2019, UTas announced plans to move its southern campus from the suburb of Sandy Bay into central Hobart to allow more Tasmanians to access higher education, especially in the greater Hobart area. s 47G

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From: EDUC - University Compacts
Sent: Friday, 18 November 2022 3:55 PM
To: s 22
Cc:

Subject: Follow up items from University of Tasmania Compact Discussion

Dear colleagues
Some follow up items from today's compact discussion with the University of Tasmania:

- s 22 – Further discussion on the university's infrastructure projects, particularly in relation to Sandy Bay.
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