



Adelaide University

Strengthening South Australia's economy through strategic alignment between research and industry

South Australia (SA) is undergoing a bold, government-driven transformation to secure its economic future, centred on a vision of a knowledge-driven and sustainable growth.

At the heart of this reform agenda is the landmark merger of the University of Adelaide and the University of South Australia, creating the new Adelaide University. It will be one of Australia's largest universities, poised to contribute approximately \$4.7 billion annually to the national economy with research expenditure of \$500 million per annum.

Adelaide University and Elsevier collaborated on this analysis, with the goal of positioning Adelaide University as an engine for innovation, productivity, and growth in South Australia.

"This report began as a challenge: to find new ways to connect Adelaide University's strengths with South Australia's economic priorities. I am delighted to see this concept realised through thoughtful collaboration and analysis."

Anton Middelberg

Deputy VC Research and Innovation,
Adelaide University

Mapping Adelaide University's research specialisation against SA's industries of economic specialisation reveals strategic opportunities, areas of alignment, niche research strengths, and latent opportunities across the university's Signature Research Themes.

Strategic Opportunity

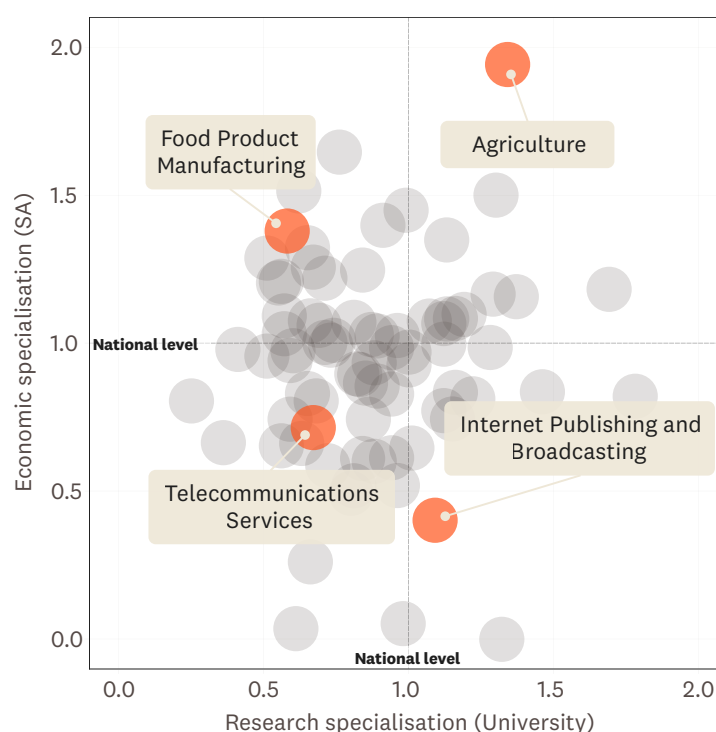
(e.g., Food Product Manufacturing)

These industries are economically significant locally but under-represented in university research.

Low Priority/ Latent Opportunity

(e.g., Telecommunications)

These industries are under-represented both economically and in university research.



Existing Alignment

(e.g., Agriculture)

These industries are both economically significant and well-represented in university research.

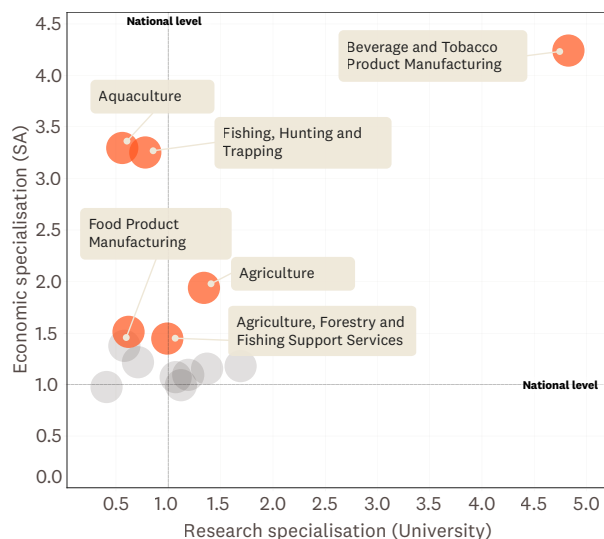
Niche Research Strength

(e.g., Internet Publishing and Broadcasting)

These industries are not currently central to the state's economy but are well-represented in the university's portfolio.

Agriculture, Food & Wine

SA exhibits strong structural and institutional advantages in Agriculture, Food & Wine—supported by a globally competitive agri-food ecosystem and strong research capabilities.



University–industry alignments exist in Agriculture and Wine Manufacturing activities

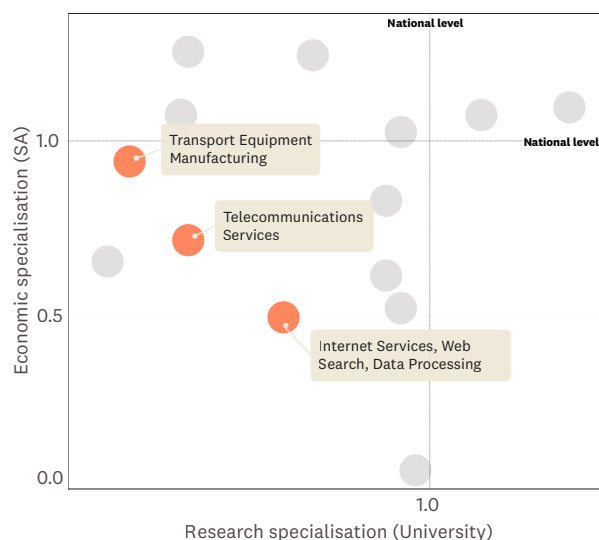
- **Agriculture:** South Australia’s economic specialisation in this primary industry aligns with Adelaide University’s research focus, supported by major translational programs in crop genomics, viticulture, and livestock systems at the Waite and Roseworthy campuses.
- **Beverage Product Manufacturing** is SA’s most specialised industry subdivision and benefits from deep research engagement. Adelaide University is strongly specialised in this area, collaborating with international producers, the Australian Wine Research Institute and regional SMEs.

Several agri-food sectors present both the university and SA with strategic opportunities for economic complexification

- **Aquaculture** and **Fishing** are dynamic growth subindustries in SA, nationally recognised for high-value, export-oriented seafood. However, aquaculture R&D is mainly led by state government agencies, with limited involvement from Adelaide University—presenting a strategic opportunity for greater university engagement.
- **Agriculture, Forestry and Fishing Support Services** is a rapidly evolving, highly specialised sector in SA with growing innovation in technical services (e.g., precision agronomy, drone spraying, and agri-data analytics), but Adelaide University’s research focus here is only moderate. Expanding applied and service-oriented research in this area offers strong potential for economic growth and diversification.
- **Food Product Manufacturing** is economically specialised in SA, but Adelaide University’s research focus is below the national level. Bridging this gap offers a strategic opportunity to add value to agricultural production and strengthen regional food manufacturing and export competitiveness.

Defence and National Security

SA hosts a growing, strategically important Defence and National Security ecosystem focused on naval shipbuilding, advanced manufacturing, space systems, and cybersecurity.



Adelaide University has the potential to drive R&D in defence shipbuilding and related defence fields

- **Transport Equipment Manufacturing** is key to SA’s shipbuilding revival. Although overall state specialisation is below the national level, Shipbuilding and Repair Services within this sector are highly specialised. Adelaide University currently lacks specialisation here, indicating a need for greater alignment.

Telecommunications and Data Services are critical enablers of the defence industry

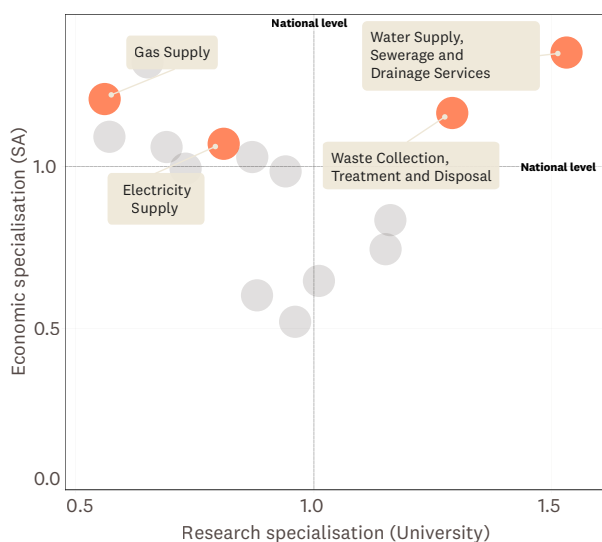
- **Telecommunications Services** and **Internet/Data Processing Services:** These globally tech-intensive sectors are not yet above national specialisation for the state but support critical infrastructure for defence communications and space connectivity. Adelaide University’s research focus is currently limited, but there is a latent opportunity for university-led uplift in telecommunications and secure network systems.

“We are proud to support Adelaide University, helping to strengthen the connection between research and South Australia’s economic transition. It has been a privilege to collaborate on a project with such potential for lasting impact.”

Nick Fowler
Chief Academic Officer,
Elsevier

Sustainable Green Transition

This theme is central to SA's climate resilience and net-zero ambitions through interdisciplinary research spanning engineering, chemistry, agriculture, and social sciences.



University–industry alignments exist in Water and Waste Services, with the university driving innovation in water and waste solutions

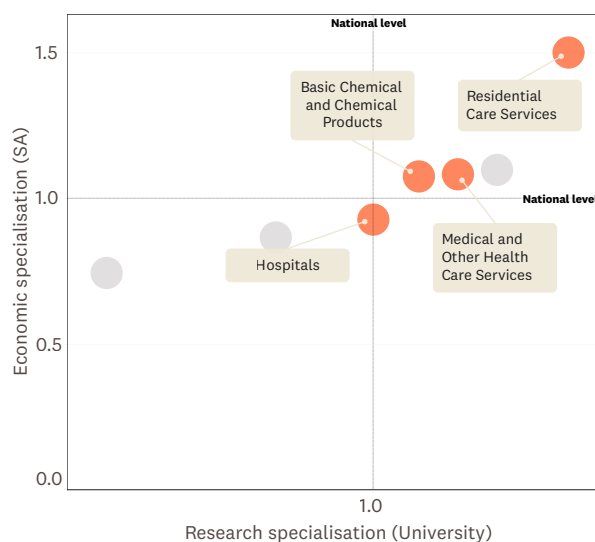
- **Water Supply, Sewerage, and Drainage Services** are highly specialised in both SA's economy and Adelaide University's research, reflecting a shared focus on water security and innovation. The university's expertise and strong industry partnerships make this a model of effective university–state alignment.
- **Waste Collection, Treatment, and Disposal Services** are economically specialised in SA, with strengths in resource recovery and progressive policy. Adelaide University is nationally specialised in research, with successful industry collaborations and commercial ventures from university-led projects, positioning the sector for ongoing growth in advanced waste solutions.

Strategic opportunities exist to strengthen Adelaide University's role in SA's energy transition, particularly in Electricity and Gas

- **Electricity** and **Gas Supply** are central to SA's energy transition, with 70% of electricity generated from wind and solar by 2023 and a target of 100% net renewables by 2027, alongside pioneering hydrogen blending initiatives. Strengthening university engagement could unlock major opportunities, especially in advancing renewables and decarbonising gas networks.

Societal and Personal Health

This theme underpins SA's largest and fastest-growing sector, Health Care and Social Assistance, with several existing university–industry alignments.



Existing alignments in health and chemical manufacturing sectors underpin care, diagnostics, and biomanufacturing

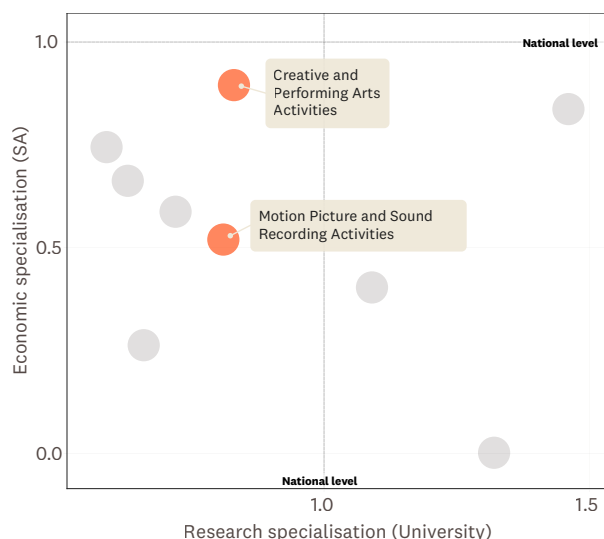
- **Medical and Other Health Care Services** exemplify strong alignment between SA and Adelaide University, with both high economic and research specialisation. The university delivers globally significant research in public health, health psychology, clinical sciences, and diagnostics—directly supporting the sector's innovation needs.
- **Residential Care Services**, including aged care, nursing homes, and disability services, are highly specialised in SA and increasingly innovative. The integration of technology, such as assistive robotics and remote monitoring, with Adelaide University's focus on challenges in aged care supports applied innovation with significant socio-economic benefits.
- **Basic Chemical and Chemical Product Manufacturing** is an emerging area of strength in SA, with growing investment and R&D in advanced chemical and pharmaceutical manufacturing. Both the state and Adelaide University show slight specialisation, presenting a strong opportunity to expand university–industry collaboration and boost SA's advanced manufacturing sector.

Opportunities exist to deepen Adelaide University's role in hospital-oriented innovation

- **Hospitals:** Despite being central to SA's health system and a key site of biomedical innovation, the Hospitals sector does not currently show above-national economic specialisation or university research intensity. Opportunities exist to further intensify involvement in hospital-based innovation, clinical trials, and digital health transformation.

Creative and Culture

This theme supports SA's identity as a cultural and artistic hub and plays a catalytic role in the state's transition towards a knowledge-based and inclusive economy.



Opportunities exist to strengthen Adelaide University's role in Creative and Digital Industries

- **Creative and Performing Arts Activities** are not highly specialised overall in SA, but there is notable specialisation in Performing Arts Venue Operation (part of Creative and Performing Arts Activities). Adelaide's reputation as a 'festival city', with events like the Adelaide Fringe, generates significant economic and cultural value. Innovative startups further indicate strong creative momentum.
- **Motion Picture and Sound Recording Activities** have below-national overall economic specialisation but show strength in post-production services. Adelaide hosts globally competitive post-production and VFX firms, and has established university-industry pathways, such as a joint VFX training program with Adelaide University. While university specialisation is below national, this track record suggests potential for investment and alignment.

About

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The report has been prepared and published by Elsevier's Analytical Services, which provides expert insights and high-quality data to academic institutions, policymakers, funders, and research institutions.

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Adelaide University

Adelaide University is a future-focused university that combines through merger the strengths of the University of South Australia and the University of Adelaide to deliver nation-leading curriculum and student experience, greater access to education, and world-class research excellence.

To find out more, please visit adelaideuni.edu.au/about

Acknowledgement of Country

Elsevier would like to acknowledge the Traditional Custodians of the lands and waters on which we live and work. We acknowledge that Aboriginal and Torres Strait Islander peoples have continuously passed on knowledge for millennia, using resources from the land and waters to nurture and promote healthy communities, and we pay our respects to Elders past and present.