

# Minister's Approval for Industrial Transformation Research Hubs for Funding Commencing in 2022 Schedule

Approved Organisation, Leader of Approved Research Program  (Columns 1 and 2)	Approved Research Program  (Column 3)	Estimated and Approved Expenditure (\$)						Total (\$) (Column 10)	Strategic Research Priority Area (Column 11)	Industrial Transformation Priorities (Column 12)	International Collaboration (Column 13)	Partner Organisation(s) (Column 14)
		2021-22 (Column 4)	2022-23 (Column 5)	2023-24 (Column 6)	2024-25 (Column 7)	2025-26* (Column 8)	2026-27* (Column 9)					

## New South Wales

### The University of New South Wales

IH220100002	<b>ARC Research Hub for Fire Resilience Infrastructure, Assets and Safety Advancements (FRIASA) in Urban, Resources, Energy and Renewables Sectors</b>	499,970.00	999,940.00	999,940.00	999,940.00	999,940.00	499,970.00	4,999,700.00	Advanced Manufacturing, Mining Equipment, Resources Technology and Services, Critical Minerals Processing, Oil, Gas and Energy Resources, Cyber Security	Ireland	CHINT SOLAR (AUSTRALIA) PTY LTD, N2N AI PTY LTD, ALLNEX RESINS AUSTRALIA PTY LTD, NU-ROCK TECHNOLOGY PTY LIMITED, TEDLA PTY LTD, KINGSPAN HOLDINGS LTD, SEBASTIAN PROPERTY SERVICES PTY LTD, WARRINGTONFIRE AUSTRALIA PTY LTD, UNITED SAFETY & SURVIVABILITY CORPORATION PTY LTD, MINES RESCUE PTY LIMITED, AST MINING SERVICE PTY LTD, AZURE MINING TECHNOLOGY PTY LTD, TANKEL, CRYPSES PTY LTD
Yeoh, Prof Guan H	This Hub aims to develop, manufacture and deploy next generation technologies and solutions that will protect Australia's critical infrastructure and assets against major natural and man-made fires. The Hub expects to position Australia as a powerhouse of fire readiness by developing end-to-end integrated systems of advanced engineering and digital technologies which will allow industry to improve fire safety training and operations with significant benefits. Expected outcomes include advanced manufacturing capacity for fire resilience and sustainable products, strategic partnerships and commercialisation pathways and opportunities by translating R&D into economic benefits such as jobs and new exports for local and international markets.										

#### National Interest Test Statement

This Hub will develop innovative, cost-effective fire protection technologies and new fire safety management skills that will transform and better safeguard Australia's critical infrastructure and assets against natural and man-made fires. By advancing new fire resilience materials, innovative fire suppression systems, and smart fire detection technologies to meet industry challenges impacted by the evolving threats of fires, this Hub will provide competitive advantages for the urban, resources, energy and renewables sectors in tackling fire incidents and fire risks. Deployment of such technologies will create new industries in recyclable fire-resistant materials, improve efficiencies and growth in Australia's supply chain of fire protection systems and create export opportunities in the global market. Other benefits include: up-skilling of the workforce in fire safety; protecting and enhancing critical infrastructure and assets that all Australians rely on; uplifting the resiliency; safe operations and practices to Australia's competitive advantage.

<b>The University of New South Wales</b>	499,970.00	999,940.00	999,940.00	999,940.00	999,940.00	499,970.00	4,999,700.00
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## Queensland

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The University of Queensland

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IH220100016  Crews, Prof Keith I	<b>ARC Research Hub to Advance Timber for Australia's Future Built Environment</b>  This project aims to transform Australia's timber and construction sectors by stimulating rapid growth in timber innovation and uptake of use of timber in buildings. It plans to enable this transformation by addressing the diverse elements required to motivate investment, stimulate innovation, satisfy stakeholder demands, define long-term social-environmental-economic benefits and establish a roadmap for change. The expected outcomes will kickstart the change process, supported by growth in advanced manufacturing across the value chain. This should provide significant benefits in stimulating an opportunity for regional development and resource diversification whilst helping the sectors transition to a circular and net-zero economy.	339,614.50	634,376.00	589,523.00	589,523.00	550,764.00	256,002.50	2,959,803.00		Advanced Manufacturing	New Zealand, Canada, United States of America, Sweden	DEPARTMENT OF AGRICULTURE AND FISHERIES, PORTER DAVIS HOMES, LENDLEASE BUILDING PTY LIMITED, LENDLEASE DIGITAL AUSTRALIA PTY LIMITED, WOOD-BASED COMPOSITES CENTRE, HYNE & SON PTY. LIMITED, ASSOCIATED KILN DRIERS PTY. LIMITED, AURECON AUSTRALASIA PTY LTD, MULTINAIL AUSTRALIA PTY LTD, ARUP PTY LIMITED, LOGGO PTY LTD, DEPARTMENT OF PRIMARY INDUSTRIES, UNIVERSITY OF CANTERBURY, CHRISTCHURCH NZ, SCION NEW ZEALAND CROWN RESEARCH INSTITUTE, THE UNIVERSITY OF BRITISH COLUMBIA, ROYAL INSTITUTE OF TECHNOLOGY, SWEDEN, BVN ARCHITECTURE PTY LTD, TTW (NSW) PTY LTD, TZANNES ASSOCIATES PTY LIMITED, PLANET ARK ENVIRONMENTAL FOUNDATION, TIMBER QUEENSLAND LIMITED, ENGINEERED WOOD PRODUCTS ASSOCIATION OF AUSTRALASIA

\* Note - Indicative funding for approved projects will be made available through a funding variation under section 54 of the ARC Act

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(Columns 1 and 2) (Column 3)

(Column 4) (Column 5) (Column 6) (Column 7) (Column 8) (Column 9) (Column 10) (Column 11) (Column 12) (Column 13) (Column 14)

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## National Interest Test Statement

Some of the largest buildings that designers are contemplating now, may not be constructed until at least 2030. Whilst steel and concrete will continue to play a significant role as building materials over the next 30 years, manufactured Engineered Wood Products (EWP) have enormous potential to be a critical driver for transforming the building and construction sector in Australia whilst reducing greenhouse gas emissions towards a Net Zero 2050. The full national benefits on offer can only be realised if we act quickly, otherwise the opportunity will be lost for large-scale inclusion of locally produced timber products in the next wave of buildings in Australia's rapidly growing mid-rise market. Benefits for the Australian timber industry will be missed, if a growing building client interest in EWP leads to reliance on import-based supply chains that stimulate manufacturing growth overseas. Increased manufacture of EWP locally will also lead to growth in Australia's carbon sequestration potential by increasing the domestic demand of softwood sawlogs, which will in turn increase the need for more plantations.

IH220100017	<b>ARC Research Hub for Advanced Manufacture of Targeted Radiopharmaceuticals</b>	498,923.50	997,582.00	991,332.00	947,213.00	914,079.00	459,539.50	4,808,669.00	Advanced Manufacturing, Medical Technologies and Pharmaceuticals	England, United States of America, Japan	GLYTHERIX LTD, CLARITY PHARMACEUTICALS LTD, TELIX PHARMACEUTICALS LIMITED, IMAGINE-X INC., BAYER CORPORATION, CYCLOWEST PTY LTD, ADVANCELL ISOTOPES PTY LIMITED, STARPHARMA PTY LTD, GENESIS CARE THERANOSTICS PTY LIMITED, CYTIVA
Thurecht, Prof Kristofer J	Radiopharmaceuticals are emerging as next generation medical technologies for addressing complex health challenges, and their manufacture offers significant economic benefit to Australia. The ARC Research Hub for Advanced Manufacture of Targeted Radiopharmaceuticals (AMTAR) aims to establish a manufacturing platform for new medical technologies combining innovations in biotechnology and pharmaceutical science. The program addresses industry-led challenges for translation of biologics as molecular radiopharmaceuticals, building capacity in biomanufacturing, radiobiology and radiochemistry. The program establishes a dedicated manufacturing pipeline, future-proofing production and securing supply chain of next generation medical technologies.										

## National Interest Test Statement

The ARC Research Hub for Advanced Manufacture of Targeted Radiopharmaceuticals aims to establish critical capacity in the production of next generation radiopharmaceuticals, placing Australia at the forefront internationally in this rapidly expanding market. Driven by technological advances through partnering with major national and international pharmaceutical and biotechnology companies, the research hub will bring significant onshore capability in terms of medical device manufacture, shoring up sovereign capabilities and ensuring the supply chain is fully supported in Australia. Onshore manufacture of high value radiopharmaceuticals will ensure Australia leads in this estimated \$175B industry in 2025, stimulating new growth in manufacturing and helping to address downstream health challenges that arise through our aging society.

**The University of Queensland** 838,538.00 1,631,958.00 1,580,855.00 1,536,736.00 1,464,843.00 715,542.00 7,768,472.00

**Queensland** 838,538.00 1,631,958.00 1,580,855.00 1,536,736.00 1,464,843.00 715,542.00 7,768,472.00

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## Victoria

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**Monash University**

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IH220100012 Webley, Prof Paul A	<b>ARC Research Hub for Carbon Utilisation and Recycling</b> This Research Hub aims to develop technologies to transform carbon dioxide emissions from our energy and manufacturing sectors into valuable products and create pathways to market to drive industry transformation. This hub aims to achieve this by developing novel electro, thermo, and biochemical methods for converting CO2 from sectors that cannot easily avoid emissions and a technological pathway for CO2 recycling. The outcomes of this Hub are likely to be transformative for industry, the economy, and society in moving the fate of CO2 from pollutant to feedstock. The benefits to Australia are intended to be the stimulation of a new industry, a skilled workforce for this emerging industry and a contribution to meeting CO2 reduction targets.	500,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	500,000.00	5,000,000.00		Oil, Gas and Energy Resources, Recycling and Clean Energy	United States of America, England, Germany, Japan	WOODSIDE ENERGY LTD., HYDROBE PTY LTD, BONDI BIO PTY LTD, BASF AUSTRALIA LTD., CO2CRC LIMITED, U-NEEK BENDING CO. PTY LTD, SOUTHERN OIL REFINING PTY LTD, BIOPLATFORMS AUSTRALIA LTD, SUGAR RESEARCH LIMITED, MERCURIUS AUSTRALIA PTY LTD, WESFARMERS CHEMICALS, ENERGY & FERTILISERS LIMITED, NK ENERGY FRONTIER CO. LTD, AGILENT TECHNOLOGIES AUSTRALIA PTY LTD, DELOITTE (AUSTRALIA) PTY LIMITED, NATIONAL AUSTRALIA BANK LIMITED, COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, CLIMATE-KIC AUSTRALIA LTD, CO2 VALUE AUSTRALIA LIMITED, FURNACE ENGINEERING PTY. LTD., FUCHS SCHMIERSTOFFE GMBH, WOOD AUSTRALIA PTY		

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LTD, GRAPHENEX  
PTY LTD

## National Interest Test Statement

This Hub is a collaboration of universities and industry to develop technologies for harvesting CO2 emissions and creating valuable products. We intend to create pathways for CO2 recycling and develop the markets for our products. Emissions from gas processing and chemical manufacturing industries equate to over 100 Mt CO2-e/year. By converting these emissions into products, our research platforms aims to help the Australian industries meet emission reduction targets and create a new and emerging industry in carbon dioxide-derived products. This research hub aligns closely with the Technology Roadmap, providing technology and market pathways for carbon capture and utilisation. Production of premium "green" CO2 based products and stimulation of a local market for these products may provide an economic pathway for new industries to compete on the global stage. It may also provide new export potential for the chemicals industry. The research programs outlined in this proposal aims to stimulate jobs and growth in a new emerging industry, estimated to have a global value of over \$1 trillion by 2050.

<b>Monash University</b>	500,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	500,000.00	5,000,000.00
<b>Victoria</b>	500,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	500,000.00	5,000,000.00
	<b>1,838,508.00</b>	<b>3,631,898.00</b>	<b>3,580,795.00</b>	<b>3,536,676.00</b>	<b>3,464,783.00</b>	<b>1,715,512.00</b>	<b>17,768,172.00</b>