AEA Innovate round 1 projects

State	University	RMS Applications Number	Project Title	Priority Area	Focus Area	Proposed Funding
ACT	The Australian National University	IV240100147	Quantum Free-Space Adaptive Optics: Enabling quantum communication over turbulent channels	Enabling capabilities	Quantum	$1,910,000
NSW	Macquarie University	IV240100263	Autonomous Drone Battery Swap	Enabling capabilities	Artificial Intelligence (AI)	$2,240,200
	The University of New South Wales	IV240100017	Facile water-based polyethylene terephthalate (PET) recycling for innovative packaging	Renewables and low emission technologies	Advanced Manufacturing	$4,991,377
	The University of New South Wales	IV240100020	Commercialisation of a novel conductive polymer for next-generation solar modules	Renewables and low emission technologies	Advanced Manufacturing	$1,000,000

	The University of New South Wales	IV240100061	Ultra-Wide Band Based Collision Awareness System	Enabling capabilities	Critical and Strategic Minerals Processing	$1,035,002
	The University of New South Wales	IV240100156	Development and Implementation of High-Throughput JPEG 2000 (HTJ2K) Hardware Encoder and Decoder with Code-block Caching Support	Enabling capabilities	Advanced Manufacturing	$857,546
	The University of Newcastle	IV240100168	Single Stage Production of Ultrahigh Grade Minerals	Value-add in resources	Critical and Strategic Minerals Processing	$1,548,046
	The University of Sydney	IV240100059	Long Range Wi-Fi systems for Underground Mines and other Large Industry Settings	Value-add in resources	Critical and Strategic Minerals Processing	$1,587,748
	The University of Sydney	IV240100186	Operationalisation of a sovereign Autonomous Underwater Vehicle capability	Enabling capabilities	Advanced Manufacturing	$1,830,000
	The University of Sydney	IV240100242	Commercially viable product development for scalable accessible space photovoltaics	Enabling capabilities	Advanced Manufacturing	$3,610,290
	The University of Sydney	IV240100268	Commercialising quantum computer readout subsystems	Enabling capabilities	Quantum	$1,942,350
	University of Technology Sydney	IV240100245	Multi-Robot Mission Control System for Autonomous Systems – Integration & Mission Demonstration	Defence capability	Artificial Intelligence (AI)	$2,082,896

QLD	**Central Queensland University**	IV240100126	An Intelligent, Adaptable, and User-Friendly Weed Management system	Value-add in the agriculture forestry and fisheries sector	Digital Agriculture	$1,136,194
	Queensland University of Technology	IV240100125	High value-added manufacturing of specialty alumina products	Renewables and low emission technologies	Critical and Strategic Minerals Processing	$4,875,473
	Queensland University of Technology	IV240100274	Advanced manufacturing of high-value organic fragrances from sugarcane feedstocks	Value-add in resources	Advanced Manufacturing	$1,150,922
	The University of Queensland	IV240100113	AI Driven Diagnostics and Predictive Maintenance of solar farms using SolarisAI Platform	Renewables and low emission technologies	Artificial Intelligence (AI)	$539,150
	The University of Queensland	IV240100187	Cost effective and portable low-field musculoskeletal MRI for high performance sport	Medical science	Artificial Intelligence (AI)	$1,310,580
SA	**The University of Adelaide**	IV240100012	SPARC-H2: Build and demonstration of a zero-electricity, solar hydrogen reactor which will produce low-cost, clean green hydrogen at commercial scale	Renewables and low emission technologies	Sustainable Fuels	$2,754,477

	The University of Adelaide	IV240100025	Manufacturing of advanced green lixiviant from biomass resources for circular critical metal production and recovery	Value-add in resources	Critical and Strategic Minerals Processing	$710,337
	The University of Adelaide	IV240100090	Commercialisation of novel AI-assisted functional imaging technologies for understanding lung disease	Medical science	Artificial Intelligence (AI)	$3,791,636
	The University of Adelaide	IV240100119	Novel Superconducting Quantum Interference Device (SQUID) Array Technology for Ultrasensitive Signal Sensing.	Defence capability	Quantum	$2,555,423
	The University of Adelaide	IV240100121	Maturing Quantum Sensors to Match Real-World Needs	Enabling capabilities	Quantum	$4,965,108
	The University of Adelaide	IV240100134	Developing Australian meat into the world's best product with an artificial intelligence-enabled meat scanner	Value-add in the agriculture forestry and fisheries sector	Digital Agriculture	$4,287,471
	University of South Australia	IV240100016	Olives the Australian Way - A pre-commercial demonstration of a novel debittering process for a new style of table olive	Value-add in the agriculture forestry and fisheries sector	Digital Agriculture	$2,146,000

	Deakin University	IV240100218	Sovereign sodium-ion battery manufacturing	Renewables and low emission technologies	Advanced Manufacturing	$3,852,685
	Federation University Australia	IV240100262	Autonomous Ground Uncrewed System for Intelligent Surveillance	Defence capability	Artificial Intelligence (AI)	$597,538
	La Trobe University	IV240100085	Sub-100 nm feature wafer-scale manufacturing for clinical scale biophotonics	Medical science	Advanced Manufacturing	$2,500,000
VIC	**La Trobe University**	IV240100099	Fully integrated digital technology solution for enhanced dairy farm management	Value-add in the agriculture forestry and fisheries sector	Digital Agriculture	$3,800,000
	La Trobe University	IV240100208	Development, validation and scale-up of smoke taint prediction technology for the Australian wine industry and wine producers globally	Value-add in the agriculture forestry and fisheries sector	Digital Agriculture	$1,780,695
	RMIT University	IV240100029	NexusCharge: Intelligent Charging and Fleet Management for Electric Vehicles	Renewables and low emission technologies	Artificial Intelligence (AI)	$4,069,130

	RMIT University	IV240100048	Revolutionising Wind Energy: Smart Wind Turbine Blades for Enhanced Turbine Efficiency and Output	Renewables and low emission technologies	Artificial Intelligence (AI)	$4,941,028
	RMIT University	IV240100060	IntelGrid: A Grid Intelligence Technology Enabling Efficient Integration of Renewables and Electric Vehicles	Renewables and low emission technologies	Artificial Intelligence (AI)	$4,606,681
	Swinburne University of Technology	IV240100036	Scaling Up Sovereign Powder Manufacturing of Critical Materials Through Sustainable Advanced Materials Innovation	Value-add in resources	Advanced Manufacturing	$2,159,623
	Swinburne University of Technology	IV240100227	Scaling Australian critical mineral production through muon tomography	Value-add in resources	Critical and Strategic Minerals Processing	$1,933,228
	The University of Melbourne	IV240100022	Building Faster and Greener: a Digitally-enabled Modular Production System for Rapid, Low Embodied Carbon Housing	Renewables and low emission technologies	Advanced Manufacturing	$2,423,363
	The University of Melbourne	IV240100166	Multiplexed Micro-physiological Perfusion System for Bioproduction and Drug Testing	Enabling capabilities	Advanced Manufacturing	$960,010
	The University of Melbourne	IV240100185	A new truly simple and affordable IoT soil moisture monitoring system: A world first shallow install sensor for deep rooted crops for smart farming	Value-add in the agriculture forestry and	Digital Agriculture	$1,049,924

				fisheries sector		
	Victoria University	IV240100211	SWER Broken Conductor: Proofing scale for commercialisation	Enabling capabilities	Artificial Intelligence (AI)	$902,372
WA	**The University of Western Australia**	IV240100075	RoadSense Analytics (RSA): AI-enabled Traffic Intelligence	Enabling capabilities	Artificial Intelligence (AI)	$2,680,674