

2026 NSW Commercialisation Showcase

Aerial UTS Function Centre
Thursday 14 May 2026





2026 NSW Commercialisation Showcase



Order of Proceedings

8:00 AM

Registration Opens

9:00 AM

Acknowledgement of Country and Introduction to the Commercialisation Showcase

Professor Hugh Durrant-Whyte, NSW Chief Scientist & Engineer

9:05 AM

Video Address from the Minister for Innovation, Science and Technology

The Hon Anoulack Chanthivong MP

9:10 AM

OPENING KEYNOTE – Future Australian Industries

Chris Shaw, CEO and Co-Founder, Advanced Navigation

9:25 AM

Attracting Global Investment and Talent for Future Industries

Rebecca McPhee, Deputy Secretary, Investment NSW

9:30 AM

PANEL – Building Australia’s Future Industries: Critical Technologies in Action

Moderator: Dr Darren Saunders, Deputy Chief Scientist & Engineer

Speakers: Tara Hamilton, Director, Semiconductor Sector Service Bureau (S3B) • Petra Andrén, CEO, Quantum Australia • Ben Kitcher, Executive Director, Advanced Manufacturing Readiness Facility • Paul McDonald, CEO, RNA Australia

10:15 AM

PANEL – Lessons in Science and Technology Commercialisation

Moderator: Anne O’Neill, CCO, ANDHealth

Speakers: George Peppou, CEO and Founder, Vow • Matt Crott, Head of Product Engineering, MAKO • Dr Jekaterina Viktorova, CEO and Co-Founder, Syenta • Vanessa Vongsouthi, Head of Bioengineering and Discovery Research, Samsara Eco

11:00 AM

Morning Tea

11.30AM

PANEL - Investing in Australian Science and Technology

Moderator: Natasha Rawlings – Venture Builder and Investor

Speakers: Elaine Stead, Partner, Main Sequence Ventures • Kylie Frazer, Co-Founding Partner, Flying Fox Ventures • Tristan Edwards, Investment Associate, Blackbird Ventures • Chris Nave, Founding Partner and Managing Director, Brandon Capital

12.15PM

PRESENTATIONS – NSW Government Investment and Support in Future Industries

Speakers: Carlos Bowkett, Director, Strategy & Programs, OCSE • Dr Jaclyn Aldenhoven, Executive Director, Investment NSW – Fostering Innovation • Dr Julia Warning, A/Director, Commercialisation and Strategic Partnerships, OHMR • Justin Koek, Director, Net Zero Industry and Innovation Program, NSW DCCEEW

12.45PM

Lunch

1.45PM

Deep Tech Showcase – Innovating for Impact

Presentations from 10 leading NSW businesses demonstrating their transformative technologies.

Session hosts: Martin Duursma and Mike Nicholls, Partners, Main Sequence Ventures

Deep Tech Pitchfest

Three-minute presentations from 12 innovative NSW SMEs.

3.30PM

Afternoon Tea

3.45PM

Deep-Tech Conversations

Session 1: Securing the Future – Scaling Advanced Manufacturing for Defence Sovereignty

Moderator: Tetyana Wotton, Director, Ernst & Young

Speakers: Michael Powell, COO, Droneshield • Brian Gordon, CTO, OCIUS • Professor Michael Biercuk, CEO & Founder, Q-CTRL • Dan Bennett, Founding Partner, Salus Ventures

Session 2: Powering the Future – Scaling Critical Energy Innovation for the Low Carbon Economy

Moderator: Dani Aleksandra, CEO, Energy Institute/Interim CEO, Decarb Hub

Speakers: Richard Hopkins, Founder & Director, P-One Technology • Dr Louise Brown, CEO, HydGene Renewables • Gabriella Nunes, Director Commercialisation, TRaCE • Shannon O’Rourke, CEO, Powering Australia

Session 3: From BioTech to BioIndustry – Scaling Life Sciences for Health, Resilience & Sovereignty

Moderator: Dr Darren Saunders

Speakers: Dr Daniel Getts, CEO and Co-Founder, CREATE Medicines • Kate Pounder, Chair of RNA Australia • Dr David Irving, Australian Red Cross Lifeblood • Elaine Stead, Partner, Main Sequence Ventures

4.30PM

Showcase Concludes

Foreword from the Hon Anoulack Chanthivong MP

Welcome to the 2026 NSW Commercialisation Showcase.

This event brings together the people, ideas and investments shaping the next generation of industries in NSW. From quantum and defence to RNA, biotech and energy, this event exhibits both the breadth of innovation underway in NSW and the ambition we have for our state's future.

The Minns Labor Government is proud to support a diverse pipeline of companies and researchers working at the forefront of science and technology. This showcase celebrates their progress in translating world-class research into real-world outcomes.

Today builds on the significant investment we made in the last NSW Budget, committing \$80 million, including \$20 million for a new Emerging Technology Commercialisation Fund, \$6 million for an expanded MVP Ventures Program, and \$2 million to launch a new diversity pre-accelerator. These will create jobs, strengthen our economy, and help build globally competitive industries.

Through insights from global industry leaders, discussions with founders and investors, and pitches from emerging companies, today is an opportunity to share lessons, build connections and accelerate commercialisation.

The recent opening of the RNA Research and Manufacturing Facility marks an important milestone for NSW.

Together with our broader investments in infrastructure and capability, it reinforces our position as a place where innovation – from advanced manufacturing to life sciences – can be developed, tested and scaled.

Initiatives like this are about realising the potential of the NSW Innovation Blueprint, which sets out a clear direction for how we support innovation – through targeted investment, strategic funding, and stronger connections between government, industry and research. It recognises that commercialisation is indeed a challenge, but also a great opportunity that can drive innovation which is central to our economic growth and community wellbeing.

I encourage you to take in all the showcase has to offer and continue the conversations that will drive the next wave of innovation in NSW.

The Hon Anoulack Chanthivong MP
Minister for Innovation, Science and Technology



Foreword from the NSW Chief Scientist & Engineer

I am pleased to say that the NSW Commercialisation Showcase, now in its third year, has become an important day in the calendar for the companies, universities and government agencies which comprise the dynamic innovation sector in NSW.

It is truly an exciting time for innovation in our state. Just three weeks ago, Anoulack Chanthivong, Minister for Innovation, Science and Technology, officially opened the RNA Research and Manufacturing Facility at Macquarie University.

This world-class facility will enable local RNA researchers to accelerate the design, test and manufacture of RNA therapies locally, including vaccines and therapeutics for both humans and animals.

The NSW Government committed \$96 million to the facility's construction, and a further \$119 million over 10 years to RNA research and development activities to be carried out there.

In early March, Minister Chanthivong announced the opening of the NSW Government's newest commercialisation program, the \$20 million Emerging Technologies Commercialisation Fund, designed to help NSW startups turn world-class research into market-ready products, services and systems that create high-value jobs and strengthen the state's global competitiveness. The ETCF has received over 250 applications.

Our most recent NSW Government commercialisation program is the \$6 million RNA Pipeline Grants program, with one recipient developing a highly targeted therapy to combat cancer cells while sparing healthy tissue, and the other working on a vaccine to improve the treatment of tuberculosis.

Today, we can appreciate the enormous potential impact of companies like these, while celebrating the success stories of companies supported through our longstanding programs. In 13 years, the Medical Devices Fund has awarded more than \$102 million in funding to 56 companies, while the five rounds of the Physical Sciences Fund has awarded \$25 million in funding to 21 companies, creating 316 new high value jobs and attracting an additional. \$390 million in private funding.

We have a fantastic schedule of speakers, panels and pitchfests for you. In the breaks, please take the time to visit as many of the companies at the 45 display tables as you can.

Please enjoy today's event and do your part to drive innovation forward in NSW.

Professor Hugh Durrant-Whyte
NSW Chief Scientist & Engineer



Biosciences Fund

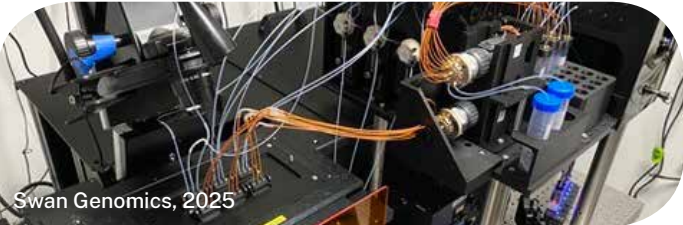
The Biosciences Fund (BioSF) is a competitive commercialisation program which supports NSW startups in biological sciences (biotechnology and life sciences) to develop and bring their technologies to market.

The objective of the BioSF is to progress new and innovative devices and systems towards commercialisation within NSW across the branches of the biological sciences including biomanufacturing, genetic engineering, synthetic biology and agrifood.

The BioSF targets innovative devices/systems within Technology Readiness Levels (TRL) 3–7 and aims to help them move along the TRL scale, be successfully commercialised and attract large-scale private investment.

Successful recipients of the second round of the BioSF were announced in March 2026.

Company	Device/System	Description	Year
All G Co Holdings	Precision fermented human beta-casein development and commercialisation	All G is an Australian biotechnology company using precision fermentation to create human caseins ‘micelles’: highly complex structures consisting of thousands of interacting milk proteins. All G’s gaol is to make micellar human caseins available at a commercial scale and incorporate it into current infant formula to offer enhanced nutritional, immunological and developmental advantages.	2025
Funding Amount: \$1,109,343		Contact: Robert Arculus, rob@allg.com	
HydGene Renewables	Building local biocatalyst manufacturing capabilities to enable sovereign green chemical production	HydGene Renewables is a NSW-based biotechnology company developing a biocatalyst platform that converts waste biomass into green hydrogen on-site – an alternative to electrolysis. HydGene Renewables has developed a breakthrough biocatalyst technology that converts waste biomass into green hydrogen for producing key primary molecules at low cost – such as ammonia and methanol – without fossil fuels.	2025
Funding Amount: \$2,000,000		Contact: Louise Brown, louise.brown@hydgene.com	
Number 8 Bio	Development of a scalable methane-reducing feed solution for grazing sheep and cattle in NSW	Number 8 Bio is tackling the approximately 6% of total carbon emissions created by the world’s 2.6 billion cattle and 1.2 billion sheep. The company has identified a methane inhibitor molecule that is highly effective, safe and can be produced at scale and low cost. This active ingredient is incorporated into a small cylinder, which is delivered orally and dissolves in the stomach over 4-6 months.	2025
Funding Amount: \$1,184,714		Contact: Tom Williams, tom@number8.bio	
Swan Genomics	Developing the next global standard in DNA sequencing	SWAN Genomics has developed a world-first DNA sequencing technology that is simpler and cheaper than conventional platforms that rely on bulk optics and highly complex chemistries. Their technology is designed with scalability and accessibility at its core and can be deployed in regional hospitals, diagnostic labs, and field sites.	2025
Funding Amount: \$450,000		Contact: Lawrence Lee, lawrence@swangenomics.com	



Swan Genomics, 2025

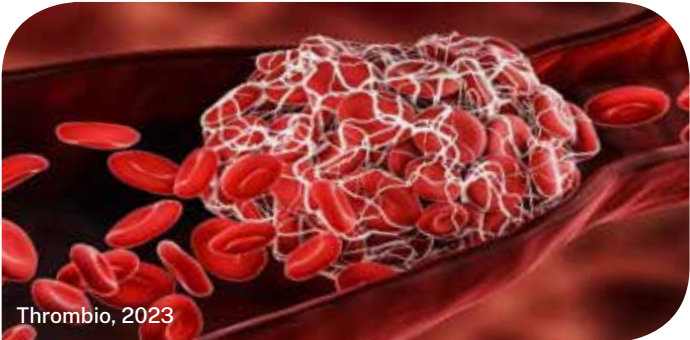


Number 8 Bio, 2025

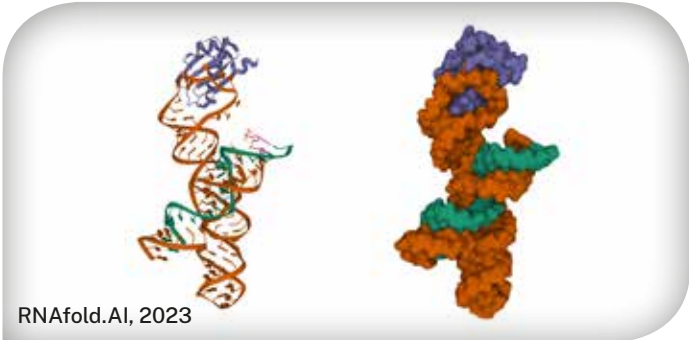


All G Co Holdings, 2025

Company	Device/System	Description	Year
RNAfold.AI	An AI assistant for RNA-targeting drug discovery	To tackle challenges in drug discovery and design, RNAfold.AI have developed a suite of AI algorithms capable of optimising new RNA targeting drugs all the way to clinical trials, even for previously ‘undruggable’ protein targets.	2023
Funding Amount: \$1,025,238		Contact: Alex Gavryushkin, 02 9188 9369, alex@rnafold.ai	
Skin2Neuron	Primavera©, a Hair Follicle-derived Neuprecursor Cell Therapy Technology for the ‘functional cure’ of Alzheimer’s disease	Skin2Neuron’s core technology is a manufacturing process for production of Hair Follicle-derived Neuprecursors (HFNs) – a new cell type for personalised medicine with potential to revolutionise the treatment of neurological disorders.	2023
Funding Amount: \$1,996,762		Contact: Michael Valenzuela, 0413 603 784, mvalenzuela@skin2neuron.org	
Thrombio	A novel antiplatelet agent – TBO-309 – which targets an entirely new antithrombotic mechanism linked to the intracellular signalling enzyme, PI 3-kinase (PI3Kβ)	ThromBio’s therapeutic, TBO-309, is a first-in class, small molecule, antiplatelet drug, for treatment of stroke by enhancing stroke thrombolysis (the breakdown of blood clots formed in blood vessels) without increasing bleeding risk.	2023
Funding Amount: \$1,478,000		Contact: Peter Bush, 0419 018 369, peter.bush@thrombio.com.au	



Thrombio, 2023



RNAfold.AI, 2023

Bushfire Commercialisation Fund

The NSW Government established the Bushfire Commercialisation Fund (BCF) under the NSW Bushfire Response R&D Mission to accelerate the development, commercialisation and adoption of bushfire technologies and services in NSW.

The objective of the BCF was to enable businesses to:

- progress bushfire technology along the commercialisation pathway, or
- adapt existing technology for use in bushfire management or operations.

The BCF targeted innovative devices/systems within Technology Readiness Level (TRL) 3–7 to help them move along the TRL scale and enable them to attract large-scale private investment.

The BCF provided funding support through a competitive process to individuals, companies, research institutes and universities to take local innovations to market.

The BCF has now concluded.

Organisation	Device/System	Description	Year
FireFront Pty Ltd	FireMapper	An offline electronic mapping solution, integrated into FireMapper to provide crucial real-time fireground information using mobile devices as a ‘mesh’ network from personnel in the field.	2023
Funding Amount: \$431,000		Contact: Konrad Gebels (MD), konrad@firefront.com.au	
Halsyon Pty Ltd	Responder HQ	Resource management tool to help teams efficiently plan, coordinate, and deploy people and vehicles during emergencies.	2023
Funding Amount: \$581,000		Contact: Matthew Pope (CEO), matthew.pope@responderhq.com.au	
SiNAB	Phoenix Pod	Fully integrated, self-contained sensor and rapid air-to-ground communication system that can attach to aircraft to provide intelligence, surveillance and reconnaissance capabilities commonly used in Defence.	2023
Funding Amount: \$215,400		Contact: Peter Axiotis (Project Lead), paxiotis@sinab.com	
Urban Research and Planning	Refuge software-as-a-service	Software to better manage community safety and evacuation from natural hazards by providing up-to-date evacuation and avoidance routes.	2023
Funding Amount: \$50,000		Contact: Dr Kam Tara (CEO), kam@urap.com.au	
Zetifi	Connecting Bushfire Operations	Building on ZetiLink to deliver last-mile connectivity for fireground management and operations.	2023
Funding Amount: \$1,000,000		Contact: Dan Winson (Founder & CEO), 0410 351 270, dan@zetifi.com	



Bushfire Technology Pilots Program

The NSW Government established the Bushfire Technology Pilots Program (BTPP) under the NSW Bushfire Response R&D Mission to enable both existing and new bushfire technologies to be field-tested and evaluated by frontline NSW bushfire services.

The objective of the BTPP was to enable businesses to:

- commercialise field-ready technology for bushfire-related applications through the trial or pilot of technology with end-user agencies in NSW
- improve end-user agencies’ awareness of innovation possibilities in bushfire management and operations through exposure to new technology.

The BTPP has now concluded.

Company	Device/System	Description	Year
Airborne Mission Systems (AMS)	AFDAU-TI Data Acquisition Unit	An onboard aircraft data platform capturing real-time information, improving communication capabilities, safety and decision making.	2023
Funding Amount: \$97,887		Contact: Levi Vohland (Co-Founder), levi@ams-aus.com	
Australian UAV Technologies	Ears and Eyes over the fireground (Flamingo Mk3)	Fully autonomous fixed wing aircraft that can improve communications and situational awareness to ground crew using RPAS technology during emergencies.	2023
Funding Amount: \$218,800		Contact: Gerry Gerlach (CEO), gerry.gerlach@silvertone.com.au	
BIOSCOUT	FireScout	Improving bushfire detection and air quality monitoring using autonomous air sampling units developed for the agricultural sector, adapted to detect bushfires from microscopic imaging of air samples.	2023
Funding Amount: \$250,000		Contact: Dr Michelle Demers (Head of Science), michelle@bioscout.com.au	
FireFront Solutions	FireMapper - Interagency Situational Awareness Capability	Providing interagency real-time situational awareness capability, and electronic mapping and information of the emergency situation.	2023
Funding Amount: \$219,700		Contact: Konrad Gebels (MD), konrad@firefront.com.au	



Company	Device/System	Description	Year
Flaim Systems	Flaim Trainer -Wildfire	Providing immersive and interactive training for bushfire volunteers and staff through a new VR training module.	2023
Funding Amount: \$250,000		Contact: Glenn Nelson (Program Manager), glenn.nelson@flaimsystems.com	
Kablamo	Remote Ignition Detection in High-Risk Areas	Validating new fire alerts quickly by analysing satellite data and secondary sources, together with fire prediction modelling to provide decision makers with information on potential risk.	2023
Funding Amount: \$250,000		Contact: Clare Burrows (Business Dev. Manager), clare.burrows@kablamo.com.au	
Kablamo	Bushfire and smoke image recognition engine	Providing tailored intelligence to firefighters for improved on-the-ground awareness during emergencies.	2023
Funding Amount: \$250,000		Contact: Clare Burrows (Business Dev. Manager), clare.burrows@kablamo.com.au	
Milvus Fire Units	Milvus Remote Area Fire Unit	Enabling firefighting in remote areas with limited access to equipment and water.	2023
Funding Amount: \$150,000		Contact: Kenneth Evans (Director), milvusfire@gmail.com	
Oneblink/ Know-Where	Good-To-Go -BTPP Round 2	Building on their successful pilot in BTPP Round 1 to connect their asset and maintenance system into corporate systems used by all NSW Government agencies.	2023
Funding Amount: \$250,000		Contact: Darren Besgrove (Director), darren@oneblink.io	



Company	Device/System	Description	Year
Decon Technologies	Smart Power Cell (SPC)	Providing remote controlled solar power for sites where supply is damaged by bushfires or where permanent power supply is yet to be established.	2022
Funding Amount: \$95,420		Contact: Brett Matheson (Executive GM), brettmatheson@deconcorp.com.au	
Diffuse Energy	Hyland Wind Turbine	Unique wind turbine design,delivering clean and renewable power for remote telecommunication sites.	2022
Funding Amount: \$100,000		Contact: James Bradley (CTO), james.bradley@diffuse-energy.com	
Loc8r	Good-To-Go-BTPP Round 1	Ensuring emergency personnel have all the necessary equipment in the field using RFID tags and handheld readers.	2022
Funding Amount: \$96,000		Contact: Darren Besgrove (Director), darren@oneblink.io	
Meshed Pty Ltd	Fire Hazard and Environmental Monitoring Kit	Evaluating weather and fuel conditions via a network of sensors and long range WIFI for early detection of fires.	2022
Funding Amount: \$78,050		Contact: Catherine Caruana-McManus (Director Sales & Strategy), sales@meshed.com.au	
Unleash Live	Live Stream AI Analysis	Improving decision making by providing tailored analysis from multiple live-streamed data/video that provide an instant overview of the emergency situation.	2022
Funding Amount: \$16,420		Contact: Hanno Blankenstein (CEO), getstarted@unleashlive.com	

Clean Technology Innovation

Clean Technology Innovation (CTI) supports the development and commercialisation of innovative technologies in NSW. CTI is part of the NSW Net Zero Manufacturing Initiative, delivered by the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW).

Company	Location	Description	Year
Novalith Technologies Pty Ltd	Sydney	Novalith will deliver a demonstration plant to produce 1tpa of battery-grade lithium carbonate from 8tpa of spodumene, validating its carbon-sequestering, sustainable extraction process and proving its efficiency, scalability and commercial potential.	2025
Funding Amount: \$1,500,000		Contact: novalith.com.au	
5B Holdings Pty Ltd	Sydney	5B will prototype, test and pilot the Next Generation Maverick Solution: an integrated, optimised and automated solar array system. The project enables major cost reductions and is designed for scalable manufacturing in high labour cost environments like Australia.	2025
Funding Amount: \$2,500,000		Contact: 5b.co	
PlasmaLeap Technologies	Sydney	PlasmaLeap Technologies will test the commercial and operational performance of low-emission nitrate fertiliser production for regional farms.	2025
Funding Amount: \$2,584,616		Contact: plasmaleap.com	
Renewable Metals Pty Ltd	Hunter	Renewable Metals will deliver a Hunter-based demonstration plant to assess the feasibility of NSW's first commercial lithium battery recycling refinery. The project supports a circular battery economy and strengthens NSW's position in clean tech across energy, transport and industry.	2025
Funding Amount: \$1,100,000		Contact: renewable-metals.com	
Sicona Battery Technologies Pty Ltd	Illawarra-Shoalhaven	Sicona will build a pilot plant to demonstrate its EFG product, which could cut energy use by 50% in Data Centres and EVs. The project will also refine the technology, address risks and validate its commercial potential –positioning it for scalable deployment.	2025
Funding Amount: \$1,675,000		Contact: siconabattery.com	
Kardinia Energy Pty Ltd	Hunter	Kardinia Energy is advancing its lightweight, flexible and recyclable Printed Solar tech by embedding quality assurance and characterisation in production. The project boosts commercial readiness, enabling deployment where traditional solar is unviable, and strengthens global market entry.	2025
Funding Amount: \$2,255,000		Contact: kardiniaenergy.com	
Hullbot	Sydney	Hullbot is developing robotic hull cleaners to cut ship fuel use and emissions by 20%, eliminate toxic coatings, and stop invasive species. With a 478,464 tCO2e/year target, Hullbot will also launch a high-tech NSW facility, creating jobs and driving clean-tech growth.	2025
Funding Amount: \$1,943,219		Contact: hullbot.com	



Hullbot, 2025



Sicona Battery Technologies, 2025

Company	Location	Description	Year
HydGene Renewables Pty Ltd	Sydney	HydGene will convert farm waste into green bio-hydrogen for ammonia, boosting agri-sector sustainability and resilience. A pilot bioreactor will be built and commissioned to validate the technology and establish a scalable model for clean hydrogen production from biomass.	2025
Funding Amount: \$2,500,000		Contact: hydgene.com	
H Nu Pty Ltd	Central Coast	H Nu will establish a production line for advanced fibre-optic current and voltage sensors for high-voltage grids, and enhance software integration. The low-cost, accurate system supports power quality, protection and the transition to a renewable energy grid.	2025
Funding Amount: \$432,500		Contact: hnu.com.au	
Lab 360 Solar Pty Ltd	Sydney	Lab 360 will commercialise drone-based daytime photoluminescence imaging for residential, commercial and utility-scale solar. Scalable fault detection and degradation analysis will improve reliability, lower costs and support a more sustainable, bankable solar future.	2025
Funding Amount: \$1,775,000		Contact: lab360solar.com	
MAKO	Sydney	MAKO will establish a NSW-based plant to manufacture their drag-reducing shark skin for aviation, targeting 38Mt global and 181,000t NSW emissions cuts annually. It enables local jobs, supply chain growth and scalable production for global deployment.	2025
Funding Amount: \$2,500,000		Contact: mako.aero	
BT Imaging	Sydney	BT Imaging will deliver the world’s first in-line Photoluminescence and Machine Vision system with automated tuning, boosting solar cell and module efficiency. It supports local manufacturers like SunDrive and Tindo Solar, and builds advanced manufacturing capability in Australia.	2025
Funding Amount: \$598,391		Contact: www.btimaging.com	
FPR Energy Limited	Hunter	FPR Energy is commercialising its particle-based concentrated solar thermal technology to provide long duration, low cost, green heat and power.	2025
Funding Amount: \$4,850,000		Contact: fprenergy.com.au	



H Nu, 2025



FPR Energy, 2025

Company	Location	Description	Year
Green Gravity Operations*	North Wollongong	The project will study the design and construction of the Weighted Object and Gripper sub-systems, converting excess energy into potential energy by lifting weights for later electricity generation.	2024
Funding Amount: \$250,000		Contact: Greengravity.com	
Halocell Energy*	Bomen, Wagga Wagga	Specialising in advanced battery technology, Halocell Energy is focusing on efficient, eco-friendly storage for renewables and EVs. Their project studies low-cost, high-efficiency perovskite solar modules and tandem stacks.	2024
Funding Amount: \$250,000		Contact: halocell.energy	
Azaneo*	Sydney	Using advanced technologies such as data analytics and precision agriculture, Azaneo aims to enhance farming efficiency and sustainability. Their project will design and develop a prototype solid-state generator system tailored to their electrical weeding technology.	2024
Funding Amount: \$225,000		Contact: azaneo.au	

Company	Location	Description	Year
Syenta	Sydney	Syenta’s project studies high-speed laser fabrication for components essential to their novel copper metallisation method in solar cell manufacturing.	2024
Funding Amount: \$250,000		Contact: syenta.com	
Orica Australia	Kooragang Island	The project investigates the technical and commercial feasibility of a CO2 circular economy project for waste gas produced at Orica’s Kooragang Island facility.	2024
Funding Amount: \$233,000		Contact: orica.com	
LLEAF*	Sydney	The project studies cost-effective production of larger-form polymers, including dye master batching, polymer extrusion/blowing, and testing.	2024
Funding Amount: \$250,000		Contact: lleaf.com	
PVT Energy	Sydney	PVT Energy integrates photovoltaic thermal (PVT) technology to optimise electricity and heat generation. Their project studies the feasibility of applying their Coolsheet PVT heat exchange panel.	2024
Funding Amount: \$250,000		Contact: pvcte.com	
CSIRO	Mayfield West	Establish cloud-based digital software infrastructure to help industry and businesses get the most of their on-site renewable energy.	2023
Funding Amount: \$3,748,680		Contact: csiro.au	
University of Wollongong	Wollongong	A Clean Energy Living Laboratory to demonstrate how microgrid technologies can ensure reliable and stable energy at large-scale businesses who have a mix of energy sources – such as EV charging, gas, solar panels and storage.	2023
Funding Amount: \$1,100,000		Contact: uow.edu.au	
Hysata	Port Kembla	A water electrolyser pilot to demonstrate how the ultra-high efficiency technology can lower the cost of green hydrogen as a renewable fuel source.	2023
Funding Amount: \$1,500,000		Contact: hysata.com	
Rux Energy*	Sydney	A new innovative method of storing hydrogen in metal organic frameworks to provide industrial users with a lower cost of supply and storage.	2023
Funding Amount: \$1,833,651		Contact: ruxenergy.com	
Enosi Australia*	Sydney	Extend Enosi’s Powertracer energy traceability platform capabilities to meet global requirements and achieve initial international commercialisation.	2023
Funding Amount: \$1,000,000		Contact: enosi.energy	
Gridcognition*	Sydney	A new software solution to help energy retailers balance supply and demand to provide more reliable energy for consumers at a lower cost.	2023
Funding Amount: \$475,921		Contact: gridcog.com	
SparkLabs*	Orange	A program to commercialise research-based projects and secure funding in clean agriculture and food technologies.	2023
Funding Amount: \$1,254,000		Contact: sparklabscultiv8.com	
EnergyLab	Sydney	Expand EnergyLab’s existing offerings to provide additional support for very early stages of growth for startups, including going international.	2023
Funding Amount: \$931,400		Contact: energylab.org.au	
Climate Salad*	Sydney	Scale up existing offerings and ecosystem building, specifically to fast-track a 9-month Global Growth Program.	2023
Funding Amount: \$578,192		Contact: climatesalad.com	
Investible Greenhouse*	Sydney	Develop the Innosabi clean technology innovation platform that will host challenges to crowdsource new ways to reduce emissions – such as how to solve the need for sustainable building materials.	2023
Funding Amount: \$745,330		Contact: greenhouse.tech	
The Melt	Muswellbrook	Establish a Cleantech Pre-Accelerator and Accelerator to generate a pipeline of net zero hardware technologies.	2023
Funding Amount: \$1,785,000		Contact: themelt.io	

Investment NSW

Investment NSW drives economic growth and prosperity for the people of NSW by bringing together business, government and global markets to deliver on the government's strategic priorities and boost innovation, industry, investment and trade.

Investment NSW leverages its strong networks across Government, industry and internationally to:

- attract investment and skills into focused industry sectors
- assist NSW businesses to export their products and services to international markets
- provide support to the state's growing innovation ecosystem
- deliver transactions to achieve whole-of-government outcomes
- produce rigorous evidence to inform good policies and decision-making across the public sector.

Investment NSW has a range of programs and initiatives such as:

Minimum Viable Product (MVP) Ventures Program

- The MVP Ventures Program supports startups and innovative SMEs in the product lifecycle between early-stage research and mature investment opportunities, through grants to drive the commercialisation of highly innovative and new products.

Boosting Business Innovation Program (BBIP) and TechVouchers

- The BBIP including TechVouchers builds innovation partnerships between Publicly Funded Research Organisations and SMEs, with improved access to researchers, training and facilities.

Diversity Pre-Accelerator Program

- This initiative aims to provide training and mentoring to help founders from underrepresented groups refine their ideas, grow their businesses, seek investment, and prepare to apply to an accelerator program.

Trade support initiatives

- **The Export Capability Building Program (ECBP)** seeks to build the next generation of exporters for NSW by empowering businesses with essential knowledge and the skills required to pursue opportunities in international markets. The Program consists of workshops and online tools to develop export capacity and skill in NSW businesses.
- **Going Global Export Programs for SMEs (GGEP)** is targeted at NSW SMEs, startups and scaleups in high-growth potential sectors which are new to exporting or seeking to diversify into a new international market. The program consists of:
 - a bespoke two- to four-month onshore market preparation curriculum
 - a market entry mission to the targeted international market to facilitate commercial engagements and establish export opportunities
 - ongoing engagement with the Investment NSW onshore and international network.
- **Going Global Trade Missions (GGTM)** support experienced NSW exporters and those with market growth potential in priority sectors to accelerate their exporting footprint in a key international market. Each mission is bespoke but can consist of:
 - a rapid mission-preparedness workshop/s to optimise participants' capacity to establish commercial outcomes through the mission
 - an outbound market development mission to the targeted international market under the badge of the NSW Government
 - ongoing engagement with the Investment NSW onshore and international network.

- **Inbound Buyer Missions** match NSW businesses with international customers and buyers helping to ensure NSW exporters have access to the best market opportunities. Inbound buyer missions are:
 - Market- and sector-focused programs to bring high quality product buyers and distributors to NSW for a bespoke tour showcasing NSW products, services and businesses with the goal of facilitating a commercial agreement
 - A sector-focused program supporting NSW businesses to showcase their products at key Australian tradeshows attended by high quality international buyers, such as Fine Food Australia.
- **TradeStart Export Advisers** is a partnership between Austrade and Investment NSW and provides a single access point for state and federal government for exporters. TradeStart Export Advisers across NSW assist NSW SMEs to achieve long-term success in international markets by providing bespoke 1:1 export support.
- **The NSW Government's International Network** in key international markets directly promotes NSW capabilities on the world stage to facilitate direct trade and investment outcomes aligned to NSW's priorities. The NSW International Network is a vital resource for NSW trade and investment ambitions, as it provides on-the-ground in-market support to promote NSW on the global stage. The Network is strategically located in markets that account for approximately 80% of NSW exports and 55% of Australia's foreign direct investment.

Investment NSW has provided support to companies including:

Company	Description
Puralink	Develops autonomous robotics platforms for inspecting, mapping and managing underground pipe infrastructure. Contact: Shyeon Delnawaz, shyeon@puralink.com.au
Walking Tall Health	Develops medical devices and digital health solutions to help people with Parkinson's disease and mobility issues walk with confidence. Contact: Matthew Brodie, matt@walkingtallhealth.com.au
Thermal Dawn (Freevolt Pty Ltd)	Builds Australian-made thermal energy storage systems that use solar power for home heating, cooling and hot water. Contact: Nick Zeniou, nick@thermaldawn.com
ALBON	Using algae to clean wastewater, capture carbon and create biochar, cutting emissions and building circularity. Contact: Tom Bessell, tom@albon.com.au
CasBio Therapeutics Pty Ltd	Biotech company advancing CRISPR-Cas technologies for next-generation diagnostics and therapeutic applications. Contact: Hosseini Salekdeh, hosseini@casbio.bio
EdgeManufact	Provides AI-driven smart manufacturing platforms for real-time process monitoring and optimisation in advanced manufacturing. Contact: Jincheol Kim, jincheol.kim@mq.edu.au
Invicta Prospects Group	Develops AI-enabled software platforms to improve workforce safety, training and operational readiness in high-risk environments. Contact: Daniel Pace, daniel@invictaprospectsgroup.com
OrthoDx	Medical diagnostics company developing rapid genomic tests to differentiate infection and inflammation in joint conditions. Contact: Antony Rapisarda, antony.rapisarda@orthodx.com.au
Proheme Diagnostics Pty Ltd	Develops non-invasive blood-based diagnostic tests for faster and more accurate neurological disease detection. Contact: Mehdi Mirzaei, mehdi.mirzaei@mq.edu.au
Defectech	Uses AI and advanced imaging to detect, classify and analyse structural defects for proactive building and asset maintenance. Contact: Meher Bahl, Ralph Noronha, hello@defectech.com.au

Medical Devices Fund

The Medical Devices Fund (the Fund) is a competitive technology and commercialisation program funded by NSW Health and administered by the Office for Health and Medical Research (OHMR).

The aim of the Fund is to progress new and innovative medical devices and related technologies in NSW towards commercialisation.

NSW Health recognises that investment in developing and commercialising medical devices and related technologies in NSW is important for ensuring innovative and effective devices can enter the market and improve patient outcomes.

Over 13 years, the Fund has awarded more than \$102.2 million to 56 projects, including grants provided under the Medical Devices Fund COVID-19 Relief Fund. A selected number of recipients are showcased below.

Organisation	Device/System	Description
Baymatob Pty Ltd	Oli™	Oli maternal-foetal health platform monitoring for serious, treatable complications in pregnancy and labour. Funding has been provided over multiple rounds. Funding Amount: \$1,300,000 (2025) Funding Amount: \$2,960,000 (2019) Funding Amount: \$1,470,000 (2017) Contact: www.baymatob.com
Kraken Coding Pty Ltd	Clinical Branches	Machine learning applied to semantic embedding of treatment guideline access to improve hospital administration. Funding Amount: \$1,930,000 (2025) Contact: www.krakencoding.com
Roam Technologies Pty Ltd	JUNO	JUNO: Ultra-portable, tankless oxygen for everyday respiratory care. Funding Amount: \$2,826,153 (2025) Contact: www.roamtech.ai
Amazing Gut Pty Ltd	Ins&Outs	Preparation of Ins&Outs for Australia market launch. Funding Amount: \$1,347,810 (2025) Contact: www.amazinggut.today
ARIA Research Pty Ltd	ARIA	Non-Invasive Bionic Vision System that provides functional vision analogue through sound to improve the quality of life for blind and vision-impaired people. Funding Amount: \$2,000,000 (2024) Contact: www.ariaresearch.com.au
Inventia Life Science Pty Ltd	Ligō	Robotic Assisted Platform for Regenerative Surgery: Pivotal Trial in Skin Cancer. Capable of bioprinting viable tissues at the site of injury to replicate native tissue and foster regeneration. Funding Amount: \$3,469,000 (2024) Funding Amount: \$3,624,650 (2021) Contact: www.inventia.life
LevTech Lifesciences Pty Ltd	FORMOSUS Polymeric Heart Valve	Heart valve replacement made from proprietary polymeric material designed to be durable, biostable and biocompatible. Funding Amount: \$2,077,961 (2024) Contact: www.levtechlifesciences.com



Baymatob, 2025



Roam Technologies, 2025



Amazing Gut, 2025

Organisation	Device/System	Description
Medlogical Innovations	ProFocal® System - Cooled Laser Focal Therapy	Creation of production facilities for the manufacture of instrumentation and sterile single-use components of the ProFocal device. Funding Amount: \$2,500,000 (2023) Funding Amount: \$1,250,000 (2017) Contact: www.medlogicalinnovations.com
SDIP Innovations	JAZBI™	Value-added JAZBI™ Bone Implant System. Progress commercialisation of the JABZI Delivery kit, developing the JABZI Osseo Dispenser, creating human data. Funding Amount: \$4,065,000 (2023) Funding Amount: \$2,775,480 (2020) Contact: www.sdipinnovations.com
Australis Scientific Pty Ltd	In-Confidence™ smart patch	Smart patch technology that aims to treat symptoms of Overactive Bladder (OAB). Funding Amount: \$750,000 (2022) Contact: www.australisscientific.com
EMVision Medical Devices Ltd	EMVision Brain Scanner	Portable, non-invasive, high-speed neuro-imaging technology to make stroke diagnosis more efficient and to fast-track decision making at the point of care. Funding Amount: \$2,500,000 (2022) Contact: www.emvision.com.au
Eudaemon Technologies Pty Ltd	Geldom	Scaled resilient material manufacturing of the next generation condom. Funding Amount: \$4,035,000 (2022) Funding Amount: \$1,000,000 (2018) Contact: www.eudaemontech.com



EMVision Medical Devices, 2022



EMVision Medical Devices, 2022

Organisation	Device/System	Description
AdvanCell Isotopes Pty Ltd	212Pb Generator	Small isotope generator that can produce a scalable supply of Alpha 212, an alpha isotope used in Targeted Alpha Therapy for cancer treatment.
Funding Amount: \$2,102,050 (2021)		Contact: www.advancell.com.au
iiShield Pty Ltd	iiPJ™ (Ischemic Injury Prevention Jacket)	Single-use medical device that aims to protect the kidneys as well as reduce thermal damage during kidney transplantation.
Funding Amount: \$2,000,000 (2021)		Contact: www.iishield.com
Beyond 700 Pty Ltd	TearView®	Additional funding to support MDF Recipients who were significantly impacted by COVID-19 to assist with meeting ongoing operational and fixed expenses.
Funding Amount: \$151,000 (2020) Funding Amount: \$830,000 (2019)		Contact: www.Beyond700.com.au
Kico Knee Innovation Company Pty Ltd	360KS Customised Knee Replacement	Additional funding to support MDF Recipients who were significantly impacted by COVID-19 to assist with meeting ongoing operational and fixed expenses.
Funding Amount: \$1,000,000 (2020) Funding Amount: \$2,500,000 (2018) Funding Amount: \$2,000,000 (2014)		Contact: www.360med.care
Perx Health	Perx	Additional funding to support MDF Recipients who were significantly impacted by COVID-19 to assist with meeting ongoing operational and fixed expenses.
Funding Amount: \$380,000 (2020) Funding Amount: \$748,000 (2019)		Contact: www.perxhealth.com
Trimph Technology Pty Ltd (now Tetratherix Pty Ltd)	TrimphDent®	Additional funding to support MDF Recipients who were significantly impacted by COVID-19 to assist with meeting ongoing operational and fixed expenses.
Funding Amount: \$481,381 (2020) Funding Amount: \$1,000,000 (2018)		Contact: www.tetratherix.com
PAFtec Australia Pty Ltd (now CleanSpace Technology Pty Ltd)	CleanSpace Respirator	Implementation and adoption of an innovative, re-usable respirator designed for Pandemic Preparedness in acute care settings.
Funding Amount: \$2,311,000 (2019) Funding Amount: \$2,196,000 (2015)		Contact: www.cleanspacetechnology.com
Ellen Medical Devices Pty Ltd	LN01 Portable Dialysis System	Cost-effective, solar powered peritoneal dialysis system used to treat kidney disease and filter waste from the blood. Able to sterilise fluid on-site.
Funding Amount: \$2,200,000 (2018)		Contact: www.ellenmedical.com
iFix Medical Pty Ltd	iFix System	3D printing technology with two components – iFixInk™ and iFixPen®, used to deliver a transparent structure to seal wounds in the treatment of corneal disease and injuries.
Funding Amount: \$1,150,000 (2018)		Contact: www.ifixmedical.com
SpeeDx Pty Ltd	ResistancePlus™	Diagnostic Tests for antibiotic resistance in Sexually Transmitted Infections (STI).
Funding Amount: \$2,500,000 (2017) Funding Amount: \$1,800,000 (2014)		Contact: www.plexpcr.com
Western Sydney LHD	Mu Catheter	Microwave ablation (inactivate with heat) system to treat hypertension through Renal Denervation (RDN) by ablating the kidney nerves.
Funding Amount: \$1,390,000 (2017)		Contact: www.wslhd.health.nsw.gov.au

Organisation	Device/System	Description
Elastagen Pty Ltd (acquired by Allergan in 2018; then acquired by AbbVie in 2020)	Tropoelastin Dermal Regeneration Template (TDRT)	Development of medical products using tropoelastin for the treatment of medical and aesthetic skin conditions.
Funding Amount: \$4,000,000 (2016) Funding Amount: \$2,000,000 (2013)		Contact: N/A
HearWorks (acquired by National Acoustics Laboratory in 2019)	Auditory Cortical Discrimination (ACORD) test module	Development of a module that will support National Acoustic Laboratory’s automatic cortical audiometer, used to conduct electrophysiology for hearing assessments.
Funding Amount: \$750,000 (2016) Funding Amount: \$662,115 (2013)		Contact: www.nal.gov.au
Atomo Diagnostics Pty Ltd	Atomo HIV Self-Test	Rapid diagnostic self-test device for HIV.
Funding Amount: \$1,800,000 (2015)		Contact: www.atomodiagnositics.com
Maverick Biomaterials Pty Ltd	Maverick Biomaterials pericardium product	Bovine materials used in the manufacture of heart valves that will be implanted into patients using keyhole surgery.
Funding Amount: \$337,500 (2015)		Contact: www.maverickbio.com
Cmee4 Productions Pty Ltd (now Sound Scouts HQ Pty Ltd)	Sound Scouts	An application incorporating games that screens for hearing loss in children.
Funding Amount: \$1,078,740 (2015)		Contact: www.soundscouts.com.au
Allegra Orthopaedics	Sr-HT-Gahnite Bone Substitute	Synthetic bone substitute material to support bone regeneration for load bearing.
Funding Amount: \$1,550,000 (2014)		Contact: www.allegraorthopaedics.com
Sydney Children’s Hospital Network (SCHN)	SyMaxys - Paediatric Bone Rod	Paediatric implants developed to treat children born with brittle bones or malformed legs.
Funding Amount: \$705,000 (2014)		Contact: www.schn.health.nsw.gov.au
Endoluminal Sciences Pty Ltd	SEAL (Solution of Endovascular Aortic Leaks)	Sealing Technology used to prevent leakage in minimally invasive heart valve implants.
Funding Amount: \$2,448,883 (2013)		Contact: www.endoluminalsciences.com
Saluda Medical Pty Ltd	EVOKE™	Implantable device that uses closed-loop spinal cord simulation for chronic neuropathic pain.
Funding Amount: \$5,000,000 (2013)		Contact: www.saludamedical.com

Natural Hazards Detection System

The Natural Hazards Detection System (NHDS) Program is a \$3.3 million, multi-phased competitive grant program aimed at testing innovative detection technologies. The goal is to improve early identification and warning systems for natural hazards such as floods and bushfires, providing residents with more time to evacuate and enabling emergency services to prioritise areas of highest risk.

The NHDS Program allows companies to demonstrate that their technology is both fit for purpose and offers value for money, while also enabling emergency management agencies to evaluate their suitability to address identified challenges. The challenges were developed by NSW Government agencies, with a focus on fire and flood detection.

Contact
Contact the NHDS team for more information:
E: nhds@chiefscientist.nsw.gov.au

Phase 1 Proof-of-Concept Recipients

Company	Device/Description	Challenge
Aquamonix	Envoy - a smart and flexible Disaster Management IoT Envoy is a low-cost, solar-powered monitoring system that uses cellular, LoRaWAN, or satellite services for data transmission.	Challenge 4- Rainfall/Soil Moisture Data (Flood)
Funding Amount: \$20,400		
Aquamonix	FloodCAM - Visual AI for Camera-Based Flood Monitoring FloodCAM is solar-powered, non-contact sensor, attachable to existing infrastructure with an inbuilt smart camera.	Challenge 1 -Water over Roads and Assets (Flood)
Funding Amount: \$48,428		
Aquamonix	Vortex Micro Station The Vortex Microstation is a compact, solar-powered sensor that utilises multiple non-contact sensing techniques.	Challenge 2 -Flash Flooding Water Levels (Flood)
Funding Amount: \$25,000		
Austrapex	Transformative Water Sensing Solution for Flash Flood Management Austrapex’s solution is a sensor that passively captures cellular signals transmitted by nearby towers and reflected off water surfaces.	Challenge 2 -Flash Flooding Water Levels (Flood)
Funding Amount: \$49,500		
Indicium Dynamics	Fire Foresight The Fire Foresight proposed solution integrates a network of portable, low-maintenance sensors that monitor bushfire fuel and soil moisture every 15 minutes.	Challenge 8- Bushfire Fuel and Soil Moisture Monitoring (Fire)
Funding Amount: \$50,000		
Kablamo	Hazards Near Me 2.0 - Citizen Insight Exchange Kablamo’s proposed solution enhances natural hazard management by transforming the ‘Hazards Near Me’ (HNM) app into a two-way communication tool.	Challenge 9 -Existing Data (Flood & Fire)
Funding Amount: \$50,000		
Kallipr	Kallipr Rain and Soil Moisture Monitoring Solution & Kallipr Flood Monitoring Solution Kallipr offers a solar-powered Internet of Things (IoT) flood monitoring sensor capable of gathering data on water level, water velocity and soil moisture in areas prone to flash flooding in real time.	Challenge 1; Challenge 2; Challenge 4 (Flood)
Funding Amount: \$103,000 (total, 3 combined applications)		
MaxWave Technology Pty Ltd	AquaSense Technology: Dual-Mode Passive Tag and AI-Driven System Aquasense passive battery-less sensors monitor volumetric water content in the soil.	Challenge 4 -Rainfall/ Soil Moisture Data (Flood)
Funding Amount: \$44,300		
MVP Engineering	FloodMate FloodMate is a novel, capacitance-based flood depth sensor designed to retrofit onto existing flood depth indicator signs.	Challenge 1 -Water over Roads and Assets (Flood)
Funding Amount: \$41,900		

Company	Device/Description	Challenge
NGIS	Automatic Water Level Estimation from Imagery NGIS’s proposed solution utilises computer vision and AI to measure water levels and velocity from existing and newly installed camera feeds.	Challenge 3 -Water Level from Imagery (Flood)
Funding Amount: \$50,000		
Nova Systems	Firewar Early Bushfire Detection System The Firewar system is a network of sensors deployed over high risk locations that can continuously monitor large areas.	Challenge 5 -Ignition Detection (Fire)
Funding Amount: \$50,000		
Silicon Vandals	EnviroDrop EnviroDrop is an environmental monitoring system designed to be aerially deployed in remote and hard-to-reach areas.	Challenge 7 -Local Fire Weather Monitoring (Fire)
Funding Amount: \$46,800		
Stratoship	Hyperspectral detection from the Stratosphere Stratoship uses a non-flammable helium airship to place a highly sensitive remote sensor in the stratosphere to provide a satellite-like view of fires in a region.	Challenge 5 -Ignition Detection (Fire)
Funding Amount: \$50,000		
WatchTowers Networks	The Mobile WatchTower Solution The Mobile WatchTower solution is an advanced, rapidly deployable platform designed to enhance bushfire detection and situational awareness for emergency services.	Challenge 6 -Fire Assessment and Monitoring (Fire)
Funding Amount: \$47,600		
WaterMark	WaterMark WaterMark transforms existing surveillance and traffic cameras into an intelligent water level monitoring network using advanced computer vision technology.	Challenge 3 -Water Level from Imagery (Flood)
Funding Amount: \$50,000		

Phase 1 grant recipients were eligible to apply for Phase 2, through a competitive process.

Phase 2 Pilot Grant Recipients

Trial technology on a large scale through real-world scenarios.

Company	Device/Description
Aquamonix (Vortex)	Vortex Micro Station - Your Tailored Flash Flooding Water Level Monitoring System The Vortex Micro Station is a cost-effective, low-maintenance, and reliable non-contact water level monitoring system tailored for flash flooding.
Funding Amount: \$163,210	Contact: Joe Leech, solutions@aqxsolutions.com.au
Aquamonix (Waterview)	FloodCAM – Visual AI for Camera-Based Flood Monitoring FloodCAM uses advanced visual AI software providing real-time flood level monitoring.
Funding Amount: \$133,181	Contact: Joe Leech, solutions@aqxsolutions.com.au
Kablamo	Building a Trusted Citizen Intelligence Workflow The Hazards Near Me app will be enhanced to allow users to securely submit still images of hazards via intuitive, guided forms.
Funding Amount: \$350,000	Contact: Clare Burrows, clare.burrows@kablamo.com.au
Kallipr	Spectra Water Level Sensors Spectra sensors are robust, cost-effective, radar-based water level sensors using low-profile vandal-resistant housings and battery system.
Funding Amount: \$350,000	Contact: Stelios Trikoulis, info@kallipr.com
NGIS	Virtual River Gauge Project This AI-powered flood intelligence pilot is combining cameras, gauges, rainfall, satellite and terrain data to deliver near real-time river heights, predictions and flood volumes to strengthen resilience during extreme events.
Funding Amount: \$350,000	Contact: Rory Donnelly, rory.donnelly@ngis.com.au
Silicon Vandals (Floodmate)	FloodMate: Building a Scalable, Self-Managed Flood Detection Network for Local Governments FloodMate is a low-cost flood detection system that provides real-time water level and water-over-road data at flood-prone road crossings.
Funding Amount: \$313,599	Contact: Tom McMenamin, tom@siliconvandals.com
Silicon Vandals (Samara)	Samara: Rapid Deployment of Real-Time Fuel Moisture Monitoring for Bushfire Resilience Samara is a low-cost sensor network that provides real-time fine fuel moisture and early bushfire detection data.
Funding Amount: \$310,841	Contact: Tom McMenamin, tom@siliconvandals.com

Natural Hazards Technology Program

The Natural Hazards Technology Program was a \$1.89 million competitive grants program to accelerate technology innovation and adoption in NSW. The Program allowed better preparation for and response to natural hazards by trialling field-ready technology with end-user NSW Government agencies. It built on the success of the Bushfire Response R&D Mission and Bushfire Technology Pilots Program and expanded the remit to provide tangible assistance in overcoming challenges from natural hazards.

The Program was designed to:

- find technology solutions to challenges faced by NSW Government agencies in the management of natural hazards
- support innovative NSW businesses to field-test their technologies with NSW Government agencies to:
 - refine and improve their product for market
 - build relationships to increase opportunities for future collaborations
- build and improve NSW Government agency awareness of innovation possibilities in natural hazards management and operations through exposure to new technology.

The Office of the NSW Chief Scientist & Engineer administered the Program.

The Program ran from January 2024 to June 2025, which included the 12-month pilot.

Natural Hazards Technology Program Recipients

NSW businesses applied for up to \$250,000 per grant application to propose their solution for one or more of the Program challenges to pilot their solution with the NSW Government agency to help solve the challenge.

Pilot Agency/ies	Successful Applicant	Challenge	Description
FCNSW (lead) & RFS (observers)	Kablamo Pty Ltd	3. Heavy plant construction models	Firestory: Fire Spread Predictions for Heavy Plant Selection in Bushfire Response Optimising the allocation of limited resources during fire operations by enhancing data intelligence through modelling time and scale scenarios for containment lines. To determine the most effective heavy plant machinery to use across diverse terrains and vegetation types.
Funding Amount: \$250,000		Contact: Clare Burrows, clare.burrows@kablamo.com.au	
RA (lead) & RFS (observers)	Compass IOT Pty Ltd	4. Understanding evacuation behaviours	Connected Vehicle Data for Real-Time and Retrospective Evacuation Decision Making Using real-time data to better understand vehicle movements during emergencies to model how drivers are likely to behave in the next flood, fire, or emergency to streamline evacuations and keep people safe.
Funding Amount: \$250,000		Contact: Angus McDonald, angus@compassiot.com.au	
RFS (lead) & FCNSW (observers)	Kablamo Pty Ltd	7. Command-and-control interface	Athena Uplift: Command and Control Interface Delivering an automated user interface that seamlessly ingests and analyses data from various systems, enabling time-critical operational decisions.
Funding Amount: \$200,000		Contact: Clare Burrows, clare.burrows@kablamo.com.au	
FRNSW (lead) & RFS, SES, & DCCEEW (observers)	Kablamo Pty Ltd	8. Intelligence creation	Firestory for All Hazards Intelligence at FRNSW Providing timely intelligence and forecasting to facilitate efficient and safe operations, ultimately safeguarding lives and property.
Funding Amount: \$250,000		Contact: Clare Burrows, clare.burrows@kablamo.com.au	

Pilot Agency/ies	Successful Applicant	Challenge	Description
RFS (lead) & FCNSW (observer)	Ninox Robotics Pty Ltd	14. Hazardous tree identification	Drone based recognition and assessment of hazardous trees following a fire operation.
Funding Amount: \$83,795		Contact: Marcus Ehrlich, marcus.ehrlich@ninox-robotics.com	
RA (lead); FCNSW, DCCEEW, RA & NPWS (observers)	Unleash live Pty Ltd	15. Rapid asset condition & damage assessment	Delivering rapid insights and intelligence to response agencies during natural hazards using drone photography, LiDAR, and machine learning to analyse large data sets.
Funding Amount: \$248,760		Contact: Alistair Bridie, alistair.b@unleashlive.com	
Water NSW (lead) & DCCEEW (observers)	Surfbee Pty Ltd	18. Measuring water flow & bathymetry in rivers	Innovative water quality sensing and data collection using uncrewed boats providing valuable insights into water conditions in NSW.
Funding Amount: \$90,000		Contact: Chrysthian Loiola, chrysthian@surfbee.io	
Water NSW (lead) & DCCEEW (observer)	CyanoLakes Australia	19. Water quality monitoring & predictive capabilities	A Blue Green Algae Forecasting and Alert System for NSW State-wide blue-green algal bloom forecasting and early-warning system using innovative satellite remote sensing technology and machine learning.
Funding Amount: \$228,550		Contact: Dr Mark Matthews, mark@cyanolakes.com	
DCS (lead); RFS & SES (observers)	QBL Media Pty Ltd	21. Multilingual emergency warnings	EmergencyCALD: AI-Powered Multilingual Emergency Warning System AI-powered multilingual emergency warning system to better reach culturally and linguistically diverse communities.
Funding Amount: \$156,400		Contact: Tat Banerjee, tbanerjee@videotranslator.ai	
NPWS (lead); FCNSW & RA (observers)	Sphere Communications Pty Ltd	‘Big Ideas’ Challenge	Enabling portable and remote drone operations beyond visual line of sight to better prevent and manage natural disasters.
Funding Amount: \$132,495		Contact: Paris Cockinos, paris@spheregroup.com.au	



Sphere Communications Pty Ltd, 2024

The Connectivity Innovation Network (CIN) brings together government, industry and research partners to address critical connectivity challenges, such as privacy-preserving data sharing, communications and network resilience, and advanced sensing.

Projects are scoped through deep engagement with universities, industry, government, emergency services, and community stakeholders. Each initiative is designed with a clear pathway to testing, adoption and commercialisation.

Our projects

CIN supports a portfolio of projects across key focus areas, with funding allocated to initiatives progressing towards real-world deployment and practical impact across NSW.

Resilient communications – striving for ubiquitous connectivity

Power Resilience Platform

A digital twin for infrastructure monitoring, using multi-agent systems to support real-time monitoring and predictive analytics to improve telecommunications continuity and mitigate disruptions.

Vehicle-as-a-Node (VaaN) Upgraded Antenna Solution

A novel, low-cost Wi-Fi performance solution designed to extend the range of existing VaaN systems on emergency service vehicles, enabling improved coverage and radio connectivity.

Rapidly Deployable Large Area Wi-Fi System (LAWIFI)

A long-range, large-area Wi-Fi system that delivers reliable connectivity in locations where mobile networks are unavailable or inconsistent.

AI, cybersecurity and data sharing

Secure Multi-Org Data-Sharing Platform (SMODS)

A platform that enables real-time, privacy-preserving data exchange between emergency service organisations to support operational coordination.

AI for Network Security System

CASPER AI is a context-aware, large language model-driven agent. Using contextual data, CASPER AI improves anomaly detection by reducing false positives and false negatives, helping to identify cyber threats and support response actions.

Sensing and situational awareness

Sensing for Disasters Solutions

A series of three projects spanning fundamental research and R&D. This solution includes new integrated sensing and communication technologies for real-time disaster monitoring, AI-enabled geospatial sensing for disaster management, and more robust approaches to rainfall and water level sensing.

Contact

E: admin@connectivityinnovationnetwork.com

W: www.connectivityinnovationnetwork.com

Case studies

Large Area Wi-Fi System: Rapidly deployable connectivity for operational environments

Leads: Professor Yonghui Li (University of Sydney), A/Prof Peiyuan Qin (UTS)

Industry collaborators: Pivotal Satellite, NBN Co., OneWeb, Real Access

Challenge: Connectivity is often unreliable in coastal, regional and disaster-affected environments due to terrain, distance and demand.

Solution: LAWIFI delivers rapid, wide-area connectivity where mobile networks are limited. It combines advanced antennas, Wi-Fi protocols and flexible backhaul to support 100+ users.

Deployment: Developed through CIN in 2022, the system is now in live coastal trials supporting Surf Life Saving NSW operations and public access.

Impact: Supports operational communication and coordination, extends connectivity into low-coverage areas, enables public access where networks are unreliable.

What's next: Progressing towards commercialisation via WANFI Technology, with a focus on scalable deployment.

Wireless Rain Gauge: Real-time rainfall sensing

Lead: Dr Kai Wu (UTS)

Challenge: Existing rainfall monitoring is limited by sensor coverage and deployment constraints.

Solution: Uses changes in wireless signals to estimate rainfall intensity in near-real-time, building on ISAC research.

Deployment: A first-generation prototype has been developed and tested on existing infrastructure.

Impact: Enables real-time rainfall monitoring, reduces reliance on physical sensors, supports improved flood modelling.

What's next: Further field validation and integration of additional sensing inputs.

A Digital Twin for Managing the Power Resilience of Telecommunications

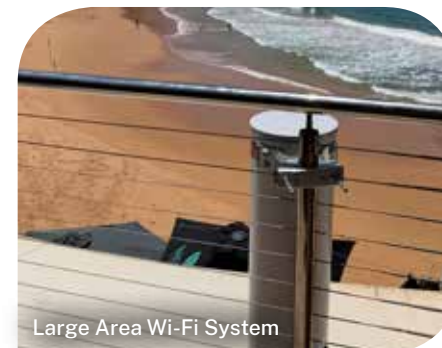
Lead: A/Prof Wenjing Jia (UTS)

Challenge: Power disruptions impact telecommunications during emergencies.

Solution: A digital twin platform providing real-time visibility and predictive analysis to support network resilience. Complemented by multi-agent systems (UOW) and drone-enabled data sharing (SCU).

Deployment: Simulates network behaviour and identifies vulnerabilities before failure.

What's next: Integration of real-world data, drone mapping and advanced analytics.



NSW Research Networks

Decarbonisation Innovation Hub

The NSW Decarbonisation Innovation Hub (the Hub) aims to accelerate the development and adoption of clean technologies to reduce emissions while generating economic benefits for NSW in collaboration with government, industry and research partners.

Funded by the NSW Government through the Office of the NSW Chief Scientist and Engineer, it supports the NSW Government’s goal of net zero emissions by 2050 and 50 per cent below 2005 levels by 2030.

The Hub aims to bridge the gap between research and viability to drive decarbonisation forward in NSW by supporting the development, demonstration, deployment and commercialisation of technologies from TRL 3 to adoption.

Our Purpose

- 1. Build a thriving ecosystem for decarbonisation innovation
- 2. De-risk deployment of decarbonisation technologies
- 3. Develop an informed and durable decarbonisation community
- 4. Create and enable regional opportunities
- 5. Reduce emissions and increase abatement

Our Partners

UNSW Sydney, University of Newcastle, Western Sydney University, University of Technology Sydney, University of Wollongong, University of Sydney, University of New England, Macquarie University, Southern Cross University, Charles Sturt University, Department of Primary Industries and Regional Development and the Department of Climate Change, Energy, the Environment and Water.

Our Networks

Electrification and Energy Systems (EESN): Accelerating renewable energy solutions and addressing barriers to the uptake of electrification across the economy.

Land and Primary Industries (LPIN): Bringing together research, industry, community and government to embed decarbonisation in the next wave of sustainable land practices in NSW. Accelerating the transition to net zero, with co-benefits for people and nature.

Powerfuels including Hydrogen (PFHN): Developing technologies to support and accelerate decarbonisation projects in green powerfuels and chemicals to commercialisation.

Contact

Learn more about the NSW Decarbonisation Innovation Hub:
E: info@decarbhub.au
W: www.decarbhub.au

Lead	Collaborator/s	Project
UNSW	SeeRock; Azure Mining Technology (AMT)	AI-Driven 3D Drill Core Reconstruction for Sustainable Green
Funding Amount: \$50,000		Contact: Guangyao Si, g.si@unsw.edu.au
Macquarie University	Smartizer	AI-driven energy management platform
Funding Amount: \$199,520		Contact: Foad Taghizadeh, foad.taghizadeh@mq.edu.au
UNE	University of Sydney; Tohoku University; Waste Circology	Biochar Mineral Interactions in Soil Carbon Stabilisation
Funding Amount: \$29,839		Contact: Shamim Mia, shamim.mia@une.edu.au

Lead	Collaborator/s	Project
UTS	UTS Rapido Industry Sponsor	Cost Effective Wireless Energy Harvesting from High Voltage Powerlines
Funding Amount: \$200,000		Contact: Michael Behrens, michael.behrens@uts.edu.au
UNSW	Decarb-Air; Handan Qingneng Technology Co	DecarbAir: Scalable CO ₂ Capture for Cleaner Air and Sustainable Agriculture
Funding Amount: \$50,000		Contact: Jason Scott, jason.scott@unsw.edu.au
Western Sydney University	NSW Govt (Treasury, DPHI); Business NSW; Urban Development Institute of Australia NSW; Blacktown City Council	Funding Nature-positive Cities: Unlocking Sustainability Bonds for Urban Green Infrastructure
Funding Amount: \$30,000		Contact: Nicky Morrison, nicky.morrison@westernsydney.edu.au
University of Wollongong	Endeavour Energy	Identifying and Removing Barriers for Electricity System Planning
Funding Amount: \$137,500		Contact: Sean Elphick, elpho@uow.edu.au
UNSW	Composite Reinforcement Solutions (CRS)	Innovative 3D Photovoltaic Panel Systems for Agrivoltaic Applications
Funding Amount: \$28,787		Contact: Mahesh Suryawanshi, m.suryawanshi@unsw.edu.au
NSW Govt (DPIRD)	Western Sydney University; Catalyst Environment Management; Skye Point Innovation	Native Biomass Crops on Degraded Lands for Biochar: An Opportunity for Land Regeneration
Funding Amount: \$25,000		Contact: Fabiano Ximenes, fabiano.ximenes@dpi.nsw.gov.au
UNSW	METASORB; Nanostratus	PFAS-Free, Anti-Fouling, Super Hydrophobic Coated Membrane Feed Spacers
Funding Amount: \$50,000		Contact: Pierre Le-Clech, p.le-clech@unsw.edu.au
NSW Govt (DPIRD)	Sundown Pastoral; Hiringa Energy	Pilot Demonstration of Dual Fuel Irrigation Pumps Using Low-Carbon Hydrogen Feedstock
Funding Amount: \$50,000		Contact: Ian Marang, ian.marang@dpi.nsw.gov.au
Macquarie University	Western Sydney University; Stryder	Powering E-Shuttles with Optimised Routes and Magnetised Cement Charging
Funding Amount: \$199,925		Contact: Sara Deilami, sara.deilami@mq.edu.au
UTS	NTT Australia Solutions	Reliable Soil Intelligence: Integrated Sensing and MRV Plus for NSW Decarbonisation
Funding Amount: \$50,000		Contact: Negin Shariati, negin.shariati@uts.edu.au
Macquarie University	InnoLabs	Smarter Hydrogen: AI-Powered Platform for Wastewater-Based Electrolysis
Funding Amount: \$50,000		Contact: Jincheol Kim, jincheol.kim@mq.edu.au
UNSW	Australian PV Institute	SunSPOT Electrification: Future-proofing Solar and Battery Decision-making for Households and Businesses
Funding Amount: \$109,486		Contact: Mike Roberts, m.roberts@unsw.edu.au
Macquarie University	Intimiti	Transforming End-of-life Polyester Textiles into Feedstock for Sustainable Aviation Fuel
Funding Amount: \$50,000		Contact: Yijiao Jiang, yijiao.jiang@mq.edu.au
UTS	Climate-KIC Australia; AgriProve; University of Southern Queensland	Virtual Soil Carbon Advisor: Trusted Advice for Farmers and Rural Communities
Funding Amount: \$50,000		Contact: Nodoka Nakamichi, nodokanakamichi@climate-kic.org.au



The Defence Innovation Network (DIN) is a university-led initiative of the NSW Government and the Defence Science and Technology Group.

DIN's vision is to drive innovation that contributes to the prosperity of NSW and Australia, by supporting Australian Defence. Its mission is to mobilise universities and industry to rapidly translate cutting-edge technology into priority Defence capabilities.

DIN fulfils its mission by supporting high-impact dual-use research, attracting external investment to NSW and the ACT, advancing STEM career pathways, and fostering collaboration between the research sector, industry, government and Australia's allies.

Key Achievements

Since its establishment in 2017, DIN has invested over \$13 million in projects that have led to development of world-class prototypes and innovative solutions for Defence. DIN has also supported more than 85 PhD students working embedded within the defence industry and collaborated with over 52 small-to-medium enterprises.

Technologies developed through DIN have been successfully commercialised, enhancing Defence capabilities and driving near-to-market innovations. Companies such as Droneshield, AMSL Aero, Ocius Technology, Advanced Navigation, Quasar Satellite Technologies, DeteQt, and others have leveraged these advancements to bring cutting-edge solutions to market.

- Over 60 projects supported through DIN programs
- \$13 million in funding distributed through DIN programs
- Over \$200 million of external investment attracted through DIN activities
- Over 85 supported PhD students to work on defence-related projects through DIN internship and scholarship programs
- 3 start-ups created as a result of DIN funding programs.

2025-26 Pilot Projects

The Architecture of Indiscernibility

University of Sydney, University of Technology Sydney

DIN Funding: \$250,000

In collaboration with RAAF, the project will explore architectural theories, techniques, and technologies that promote indiscernibility, in order to adjust levels of detectability and deliberately reshape the theatre operational environment.

Real-time Cognitive Profiling under Stress: a Multimodal, Machine Learning, VR-based approach

Western Sydney University, Macquarie University, University of Wollongong, FortifyEdge

DIN Funding: \$150,000

The project aims to use stress to isolate latent cognitive traits by fusing biometric, eye-tracking, and behavioural data, applying virtual reality, and leveraging multimodal machine learning to track resilience, recovery and trait-level stability.

Virtual-GPS for GNSS-Denied Airspace: Beacon-Based Sensing and Stochastic Control for UAS Navigation

Macquarie University, University of Newcastle

DIN Funding: \$150,000

This project develops a new approach to guide unmanned aircraft systems (UAS) in global navigation satellite system (GNSS)-denied airspace using beacon-based 'virtual GPS'. By optimising support and target UAS trajectories, it ensures accurate navigation under contested conditions. The work will deliver algorithms and tools to enhance Defence surveillance and autonomous operations.

Strategic Investment Initiatives

ClearSight: LLM Agent Assisted Network Discovery and Mapping Under Partial Network Visibility

University of Sydney, UNSW Sydney, Catharsis

DIN Funding: \$500,000

The project will develop an AI agent-based prototype to enhance cyber network situational awareness in crisis environments. The tool will leverage large language model-driven agents to reconstruct network topology, identify services, and infer administrator intent from incomplete data. By employing strategically collaborating autonomous agents, the system aims to rapidly establish situational awareness across diverse, multi-vendor networks, supporting faster and more effective decision-making for Defence operations.

ADSUN Innovation Grants

Advanced Underwater Sensing and Navigation for Long-range Autonomy in GNSS-denied Environments

University of Sydney, University of Melbourne, University of Tasmania, Royal Melbourne Institute of Technology, Swinburne University of Technology, Phasor Quantum, Quantum Brilliance.

DIN Funding: \$400,000

The quantum vector magnetometer technology will be integrated onto manned or unmanned Defence platforms to provide advanced magnetic surveillance and GPS-denied navigation capabilities. The technology has dual-use applications in airborne, land and underground navigation and geophysical surveying for future route planning.

Secure, Long-Range Underwater Acoustic Communications using Delay-Doppler Waveforms and Adaptive Beamforming

Macquarie University, University of Melbourne

DIN Funding: \$400,000

This project addresses the critical need for secure, long-range underwater acoustic communications in contested maritime environments. It will deliver algorithms, software tools and early-stage hardware to enable 5–150kbps underwater links over kilometre-scale distances. Project outcomes will significantly advance Defence capabilities in autonomous underwater communications, sensing and surveillance.

Prototyping Mission-Ready Functional Acoustic Surface Tiles for Next Generation Underwater Platforms

UNSW Sydney, Royal Melbourne Institute of Technology

DIN Funding: \$400,000

The project develops a prototype of functional acoustic sensor tiles for next-generation underwater platforms that can be manufactured in Australia. The technology will be supported by a digital twin system for rapid and bespoke optimisation to maritime assets. This dual-use technology will provide increased situational awareness and enhance detection and tracking of threats to high-value assets.

NSW Research Networks

NSW Smart Sensing Network

The NSW Smart Sensing Network (NSSN) is a leading research and innovation network funded by the NSW Government through the Office of the Chief Scientist & Engineer. A consortium of the seven leading universities across NSW and the ACT, the NSSN brings together university, industry and government to translate world-class research into innovative smart sensing solutions that create value for the economy, environment and society of NSW and beyond.

Why smart sensors matter

Smart sensors are transforming industries by detecting changes in the environment around them and providing real-time data to support informed decision-making. Smart sensing technology is revolutionising manufacturing, agriculture, energy production, human health and more. AI-enabled, networked sensors are powering the Internet of Things (IoT), Industry 4.0, and Smart Cities – reshaping the way we work and live.

Driving innovation since 2016

Celebrating 10 years of innovation in 2026, the NSSN develops real-world solutions to pressing challenges in collaboration with valued partners from across industry and government.

Focus areas

Our current projects align with the evolving needs of industry, government, and end-users, focusing on:

- **Environment & Agriculture:** Sustainable solutions for natural resource management
- **Human Health:** Advancing healthcare through smart diagnostics and monitoring
- **Natural Hazards:** Improving disaster resilience and response
- **Net Zero:** Accelerating the transition to a low-carbon future
- **Smart Places:** Enabling intelligent infrastructure and connected communities.

Contact

Learn more about the NSW Smart Sensing Network and get in contact:

E: admin@nssn.org.au

W: www.nssn.org.au

How can we help you?

For Companies

- Help you identify the gaps in your business where smart sensing innovation can deliver efficiencies or give you a competitive advantage
- Connect you with world-class research and cutting-edge facilities at NSW leading universities
- Build R&D partnerships that result in tangible benefits for your business.

For Government departments & agencies

- Help you identify the gaps in your operation where smart sensing innovation can deliver efficiencies or position you to deliver better outcomes to taxpayers
- Connect you with world-class research and cutting-edge facilities at NSW leading universities
- Provide independent advice, consultancy and scientific validation.

For Researchers

- Facilitate partnerships with industry partners, government agencies and researchers in complementary disciplines
- Assist with identifying funding opportunities and preparing proposals
- Promote your research.

The NSSN Grand Challenge Fund offers grants of up to \$100,000 to support R&D collaborations between NSSN member universities and industry or government partners.

Case Studies

Across 50 completed collaborative R&D projects and a further 23 active collaborative R&D projects, we work with partners to bring innovation to life. Here are just two current examples.

Biosensing Technologies for Hive Health Monitoring

More than 75% of global food crops depend on pollination, yet bees are facing growing threats from diseases such as Varroa mites, pests and environmental stressors like pollution, putting ecosystems and global food systems at risk. This NSSN Grand Challenge Fund project is developing a smart, remote sensing system using nanostructured gas sensors and machine learning to provide real-time insights into hive health, enabling early intervention, supporting sustainable beekeeping and strengthening agricultural productivity.

Innovation in action

- Multi-disciplinary collaboration between researchers from three universities and one industry partner
- Integration of advanced sensing technologies, including nanostructured gas sensors, IoT-enabled systems and machine-learning analytics
- Development of a remote, non-intrusive hive monitoring system capable of real-time detection of chemicals and key health indicators
- Enabling proactive alerts and predictive insights to support early intervention and improve hive health outcomes.

Project partners: Macquarie University, Australian National University, University of Sydney, LB Agtech Holdings Pty Ltd

Hearing impairment in Adults: Vitals, hEmodynamics, Neuroimaging and Sleep sensing (HAVENS)

Hearing loss affects more than 5% of the global population and one in five Australian adults, and is increasingly linked to a higher risk of dementia later in life. This Australian-first study is using advanced sensing, wearable devices and machine learning to track brain activity, sleep and hearing in device users, aiming to determine whether hearing aids and cochlear implants can help protect cognitive function and support healthier ageing.

Innovation in action

- Multi-disciplinary collaboration between researchers from two universities and one industry partner
- Integration of advanced sensing technologies, including wearable devices, neuroimaging, sleep sensing and machine-learning analytics
- Longitudinal study tracking brain activity, biological markers, hearing and sleep in hearing device users
- Generating predictive insights into the relationship between hearing loss, device use and cognitive decline to support early intervention and healthy ageing.

Project partners: Macquarie University, University of Sydney, Cochlear



NSW Research Networks

NSW RNA Research and Training Network (NSW RRTN)

Accelerating RNA Innovation in NSW Through Research, Partnerships and Workforce Capability

The NSW RNA Research & Training Network (NSW-RRTN) is a pioneering initiative, supported by the Office of the Chief Scientist & Engineer. The Network is designed to position NSW and the ACT at the forefront of RNA science, innovation and translation to clinical outcomes.

Based at UNSW Sydney, NSW-RRTN unites 12 universities and affiliated medical research institutes across NSW and ACT, fostering collaboration among academia, government and industry through a combination of research and training initiatives. NSW-RRTN supports the state’s strategic commitment to advancing RNA therapeutics and diagnostics that improve human and animal health, strengthen biosecurity, and foster new industries.

Programs

The NSW-RRTN drives RNA innovation through integrated programs that connect research excellence, workforce development and strategic funding.

Research Programs

Three priority themes focused on RNA delivery systems, RNA science and therapeutics targeting the immune system and brain.

Student Network

Postgraduate scholarships bridging academia, industry and government to build Australia’s RNA research workforce.

Training Initiatives

GMP workforce training and professional courses preparing skilled professionals for the RNA biomanufacturing sector.

Funding Opportunities

Strategic funding for innovative projects, collaborations and initiatives that advance NSW’s RNA ecosystem.

Building Australia’s RNA Future Through Collaborative Excellence

The NSW-RRTN is designed to accelerate research, foster new collaborative partnerships and promote excellence in RNA science, education and training. It also aims to address critical regulatory, legal, clinical and ethical dimensions of RNA technology through a cross-disciplinary approach that spans STEM and SHAPE fields.

The NSW-RRTN focuses on overcoming key challenges in the design and development of RNA therapeutics, such as targeted delivery and treatments for the immune system and the brain.

A key feature of the NSW-RRTN is its integrated Training Program, cultivating a skilled workforce capable of supporting the RNA sector’s growth. This includes postgraduate scholarships, industry internships and professional development through short courses and micro-credentials, including GMP training for advanced biomanufacturing. The program is designed to be scalable and adaptable, supporting both immediate needs and long-term national strategies.

These efforts are closely aligned with major state investments, including the RNA Research and Manufacturing Facility operated by Aurora Biosynthetics, and RNA Australia. Together, these form the backbone of a \$200+ million, decade-long commitment by the NSW Government to RNA research and development.

By fostering collaboration between academia, industry, and government, the NSW-RRTN will enhance the region’s capacity to lead in RNA therapeutic development and manufacturing, empowering the next generation of RNA researchers and innovators to strengthen Australia’s biomedical capabilities, and deliver tangible benefits to society.

Contact

E: rrtn@unsw.edu.au or follow us at [linkedin.com/company/nswrrtn](https://www.linkedin.com/company/nswrrtn)

W: www.rrtn.org.au

Strategic Funding Opportunities

NSW-RRTN Strategic Fund

This initiative allocates funding to special projects and initiatives in response to pressing needs, to enhance the network’s impact and address emerging opportunities as the NSW-RRTN evolves. A total of 11 applications were funded with \$966,712 awarded in grants.

Recipient/University	Project
Jake Baum UNSW Sydney	Developing and testing in vivo mRNA encoded anti-malarial Monoclonal Vaccine therapies. Grant: \$100,000
Andrew Care University of Technology Sydney	Building a NSW-RRTN RNA Manufacturing pipeline to accelerate product scale up and translation. Grant: \$100,000
Edmund Chung University of Sydney	In-vivo generation of chimeric antigen receptor (CAR) T-cells using lipid nanoparticles to treat kidney disease. Grant: \$100,000
Jonas Kaltbeitzel UNSW Sydney	Engineering in an Inosine-Specific RNase for sgRNA Synthesis and RNA modification mapping. Grant: \$51,000
Daniel Mediati University of Technology Sydney	Programmable non-coding RNA-based regulatory circuits to tune cell wall synthesis and degradation rates. Grant: \$89,462
Lezanne Ooi University of Wollongong	Advancing Splice-Switching RNA Therapeutics for Amyotrophic Lateral Sclerosis: Preclinical Development Toward Translation. Grant: \$50,000
Febrina Sandra UNSW Sydney	Scalable Manufacturing of Nanobody Targeting Lipid Nanoparticles (tLNPs) for CAR-T and CAR-M Cell Therapy. Grant: \$100,000
Kurt Sengul Macquarie University	Can the RNAissance Survive the Disinformation War? Emerging Threats, Transnational Challenges, Communicative Solutions. Grant: \$100,000
Jamie Triccas University of Sydney	Development and Preclinical Validation of a Pulmonary RNA Vaccine Candidate for Tuberculosis. Grant: \$98,000
Rohan Walker University of Newcastle	The Immunity Project: From Vaccine Production to Protection –Inspiring the Next Generation of Biomedical Innovators. Grant: \$78,250
Guoying Wang Macquarie University	Transforming Glioblastoma Treatment through Targeted RNA Delivery and Blood–Brain Barrier Modulation. Grant: \$100,000

Engineering Biology Challenge

This grant initiative under the NSW-RRTN Strategic Fund is designed to foster collaboration between computer science and biology, leveraging AI-driven approaches to advance RNA and protein research. A total of 2 applications were funded with \$399,753 awarded in grants.

Recipient/University	Project
Selene Fernandez-Valverde UNSW Sydney	Biomimetic AI design of RNA scaffolds for bioactive RNA delivery in plants. Funding: \$199,753
Rowena Bull Kirby Institute, UNSW Sydney	Using artificial intelligence to rationally guide mRNA HCV vaccine design. Funding: \$200,000

NSW Research Networks

Semiconductor Sector Service Bureau (S3B)

S3B was established through the Office of Chief Scientist and Engineer to support growth of the semiconductor sector in NSW and Australia across the whole supply chain.

S3B is hosted as a joint venture between the University of Sydney, Macquarie University and the UNSW Sydney. The entire consortium, in partnership with CSIRO, the Australian National Fabrication Facility (ANFF) and participants from across the Australian semiconductor industry, represents a globally networked, cross-functional grouping that spans the entire semiconductor value chain.

S3B's mission is to support Australian companies and researchers who design, make or use semiconductors to succeed by enabling access to supply chain capabilities, information, networks and talent. S3B promotes semiconductors as the enabling capability underpinning growth sectors.

S3B services the sector in four key areas: ecosystem, talent, supply chains and market information.

A Connected Ecosystem

S3B brings people together to match needs with capabilities via events and engagement with stakeholders across companies, universities and governments.

Events

S3B runs regular events, webinars and technical workshops independently or in partnership with Australian and international industry and research organisations.

Semiconductor Australia

Semiconductor Australia is a national investor conference showcasing Australia's semiconductor, quantum and photonics capabilities. The event brings together companies, investors, researchers and policymakers to increase visibility of the sector, support capital attraction and build confidence in Australia's deep-tech landscape.

International Delegations and Outreach

To create practical opportunities for partnerships, market access and international visibility, connections are enabled through facilitated introductions, structured delegation visits and representation at key global events.

Become a S3B Member (FREE)

Membership of the Semiconductor Sector Bureau is for institutions and professional individuals within the semiconductor sector from devices through to end-user application and related enterprises.



Talent

The S3B Jobs Board

A dedicated platform designed to grow and connect Australia's semiconductor talent pool. Part of our mission is to strengthen the national talent pipeline and support the long-term growth of the semiconductor ecosystem by connecting individuals with opportunities across universities and industry. Whether you're a researcher, engineer, software developer or business professional, the Jobs Board offers access to roles across Australia's dynamic semiconductor sector.



Global Reach Student Fund

This fund will provide travel bursaries for undergraduate, postgraduate and PhD students enrolled at Australian institutions to enable access to international conferences, programs and experiential learning opportunities that develop their expertise in relation to semiconductor technologies. Students can apply for travel bursaries up to **\$1500** to be allocated towards travel, accommodation and registration expenses only.

Supply Chain

MPW and CAD Access Subsidy

This initiative enables startups, researchers and companies to prototype and validate devices with the backing of international partners and coordination by S3B. The program offers subsidised access to Multi-Project Wafer (MPW) runs and cloud-based CAD design environments and licensing, helping to accelerate ASIC development, hardware innovation, testing and packaging.

Working in collaboration with global fabrication providers including, but not limited to, CMC Microsystems, Europractice, MUSE Semi and Pragmatic Semiconductor, S3B will coordinate MPW tape-outs across multiple technology nodes.

Semiconductor Innovation Fund: IP & Grant Support Subsidy

This initiative supports early-stage companies and projects to strengthen their funding applications and commercial positioning through professional services.

It provides subsidies for grant writing, IP advisory and other business-enabling services to help Australian semiconductor companies secure funding, clarify their IP strategy and focus on innovation.

Grants of up to \$15,000 are available, with funding scaled based on the potential impact and scope of each project.

Market Information

S3B provides data-driven market information to support informed decision-making across the semiconductor ecosystem. This includes access to industry insights, technical consulting expertise, and targeted advocacy to strengthen capability, guide investment and promote sector growth at both national and international levels.

Contact

E: info@s3b.au

W: s3b.au

NSW Research Networks

Space Research Network

The NSW Space Research Network (SRN) was established in 2021 and is a university-led initiative of the NSW Government designed to enhance NSW space industry capability through collaboration with government and academic research institutions.

Pilot R&D Projects Program

The Pilot R&D Projects Program funding scheme is an annual, competitive program supporting cross-disciplinary collaboration in NSW and the ACT. The key objective of the program is to discover and enable new collaborative project ideas for space and to help develop these ideas into concepts or technology that can attract further investment from governments and industry.

Projects should demonstrate high potential to satisfy an existing or emerging space capability need or a current or emerging space industry need.

The SRN has supported 26 Pilot R&D Projects with a total of \$3.3M of funding. Several of these projects have gone on to secure further funding from industry and government, including for deployment into space for in-situ testing.

Recipients of funding from the 2025/2026 round of the Pilot R&D Projects Program will be announced in June 2026.

Contact

E: admin@srn.org.au

W: www.spaceresearchnetwork.org.au

Lead/Collaborator/s	Year – Project
WSU MQ	2024/2025 – Project Heimdall - Exploring Near-Space Platforms for Monitoring Targets from Launch to Re-Entry using Neuromorphic Event Vision Sensors and Infrared Sensors This project explores a unique capability for tracking space targets from launch to re-entry using a rapid deployment near-space imaging platform. Lifted to 30km altitude by a high-altitude balloon, the proposed platform features a novel combination of neuromorphic event vision sensors, conventional image sensors, and infrared sensors to track and characterise space targets. This work offers an exploration of low-cost and responsive monitoring of the full life cycle of space objects from a unique vantage point as a timely solution towards achieving total space situational awareness and the Australian Civil Space Strategy Capability Priorities with safer launches and re-entries
Funding Amount: \$94,200.52	Contact: Nicholas Ralph, n.ralph@westernsydney.edu.au
UNSW MQ, University of Adelaide	2024/2025 – Pattern of Life Identification for Geosynchronous Satellites Using Transformer-Based AI Foundation Models This proposal addresses the challenge of characterising pattern-of-life (PoL) behaviours in geostationary and geosynchronous (GEO) satellites, crucial for managing the increasingly congested orbital environment. Leveraging Transformer-based foundation models, it aims to extract meaningful insights from sparse optical tracking data. Objectives include developing the Optical PoL Analysis and Library (OPAL) dataset, implementing image-based and time-series methods for detecting satellite manoeuvres, and integrating these approaches into a robust PoL identification framework. This work enhances the monitoring and analysis of GEO satellites, ensuring their safe and efficient operation amidst growing global reliance on this critical orbital regime.
Funding Amount: \$121,600	Contact: Yang Yang, yang.yang16@unsw.edu.au

Lead/Collaborator/s	Year – Project
UTS MQ	2024/2025 – Dual-Band Power Amplifier Design using Gallium Nitride Technology for Satellite Communication Systems This project develops a dual-band millimeter-wave Doherty-like power amplifier for satellite communication (SATCOM) applications, using 150-nm GaN HEMT technology. The goal is to design a high-efficiency amplifier that enhances output power, linearity, and overall performance across two frequency bands. This work is significant for improving SATCOM, especially in remote areas, and will strengthen Australia’s position in the global SATCOM market. By advancing GaN HEMT technology, the project supports Australia’s growing expertise in advanced electronics, boosting economic growth, job creation, and technological self-sufficiency in critical communication infrastructure.
Funding Amount: \$88,000	Contact: Xi (Forest) Zhu, xi.zhu@uts.edu.au
UTS USYD	2024/2025 – Space-Deployable Adaptive 3D Printed Lens Antenna Systems for Inter-Satellite Communications This project focuses on developing a 3D printed, space-deployable, electrically controlled adaptive lens antenna system for inter-satellite communications. By addressing key challenges of satellite motion, link reliability, and scalability, the antenna system will provide independently steerable multi-beams with high directivity and wide coverage, enabling seamless, secure, and resilient data relay in dynamic Low Earth Orbit (LEO) constellations. The objective is to deliver a cost-effective, energy-efficient, and compact solution that significantly enhances satellite network performance. This holds great potential to transform space technologies, meeting the rising demand for high-capacity, low-latency communications while paving the way for global connectivity in future technologies.
Funding Amount: \$103,438.4	Contact: Peiyuan Qin, peiyuan.qin@uts.edu.au
UNSW USYD, Saber Astronautics	2024/2025 – Electrodynamic Tether System Avionics for De-orbiting Electrodynamic tethers (EDT) are long orbiting conductors used for propellantless propulsion of spacecraft de-orbiting and manoeuvring. When an EDT moves with a velocity (v) relative to the plasma in the Earth’s magnetic field (B), an electric current (I) is driven in the tether which induces the drag force (Lorentz Force) FL. The goal of this proposal is the development of the DragEN EDT avionics system.
Funding Amount: \$120,976.8	Contact: Shagun Aggarwal, shagun.aggarwal@unsw.edu.au
UNSW UON	2024/2026 – Improving Forecasting by an Ionosphere and Thermosphere Model Through Inversion Techniques Atmospheric drag is critical for spacecraft tracking, manoeuvring, and control in LEO. Space weather, originating from the Sun, affects atmospheric density, sometimes with costly effects on satellites. Space weather impacts on the upper atmosphere are complex making accurate forecasting challenging. We propose to use state-of-the art satellite observational data coupled with innovative analysis techniques to constrain the Global Ionosphere Thermosphere Model (GITM). The resulting Supertuned-GITM will improve forecasting of space weather impacts such as density perturbations. This will reduce uncertainty in satellite differential drag calculation, allowing for more precise spacecraft manoeuvring and control in low Earth orbit (LEO).
Funding Amount: \$76,770.4	Contact: George Bowden, g.bowden@unsw.edu.au

Physical Sciences Fund

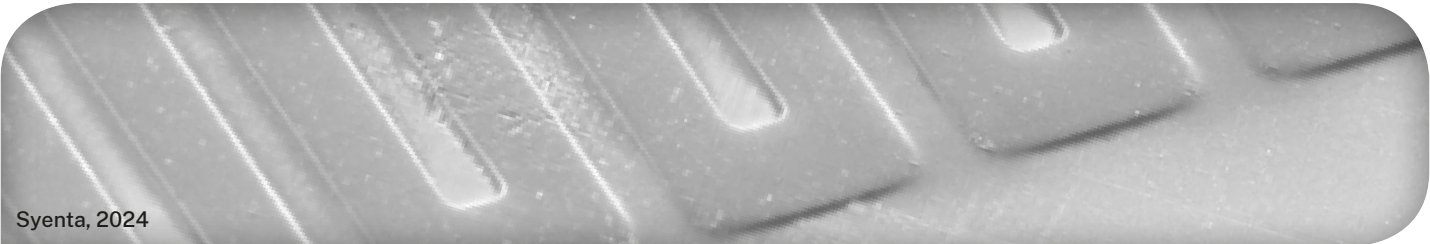
The Physical Sciences Fund (PSF) is a competitive development and commercialisation program for technological innovations in NSW.

NSW has great strengths in research across a wide range of scientific fields. The PSF aims to build on these strengths by supporting the translation of research into devices and systems ready for commercialisation, and deliver significant social, economic and environmental benefits to NSW.

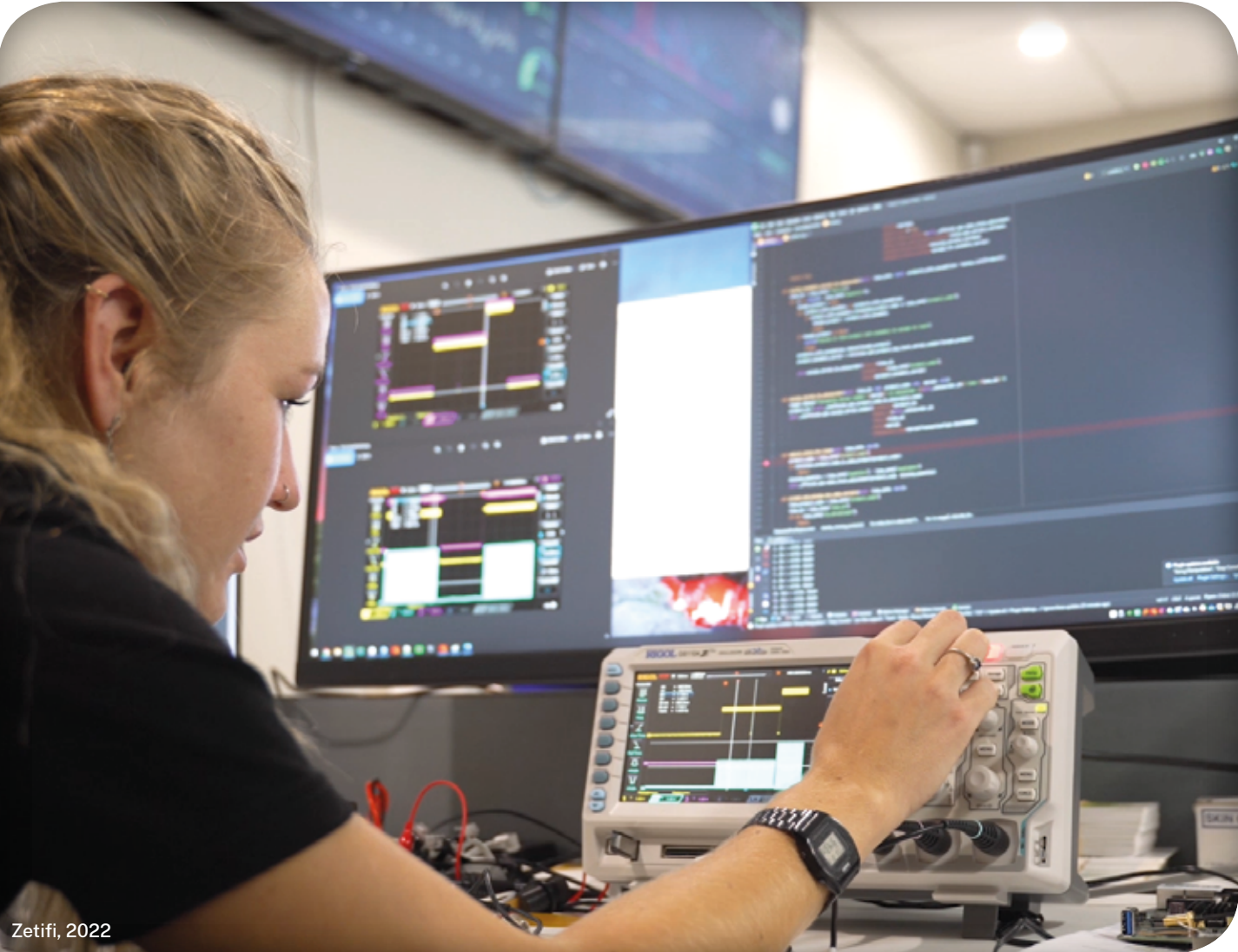
The PSF provides financial support for the development of new and innovative devices and systems within Technology Readiness Levels (TRL) 3 – 7, across the branches of the physical sciences and engineering, including physics, chemistry, astronomy and the earth sciences.

The PSF provides funding support through a competitive process to individuals, companies, research institutes and universities to take local innovations to market.

Organisation	Device/System	Description	Year
Ginigai	Artificial Intelligence Driven Fire Prediction and Detection System	Ginigai’s technology uses AI and radio sensing to provide real-time monitoring and hazard detection by analysing changes in Wi-Fi and radio signals. This system can detect fires, moving objects and hazardous gases, and it pinpoints their exact locations for quicker responses.	2024
Funding Amount: \$1,145,605		Contact: Aruna Seneviratne, 0439 969 066, aruna@envision-sys.com	
Lab 360 Solar	Quality Assessment of Solar Farms – Daytime Photoluminescence Imaging from Aerial Drones	Lab 360 Solar’s core technology allows daylight photoluminescence (DPL) imaging during the day and from aerial drones, making it a more practical and cost-effective solution in comparison to existing methods.	2024
Funding Amount: \$676,120		Contact: Thorsten Trupke, 0415 827 131, thorsten.trupke@lab360solar.com	
Microtau	Shark-skin Drag-reducing Aviation Adhesive Film	MicroTau’s riblet film is a drag-reducing adhesive film with microstructured surface derived from the skin of fast swimming sharks. The microscopic patterning reduces friction drag in turbulent flow, resulting in efficiency gains of up to 4% with commensurate reductions in CO ₂ emissions.	2024
Funding Amount: \$1,528,123		Contact: Duncan Bell, 0432 614 423, duncan@microtau.com.au	
Syenta	Next-Gen Chip Fabrication: High Speed Additive Manufacturing of Advanced Packaging	Syenta has developed a game-changing new method to additively fabricate electronics, called Localised Electrochemical Modelling (LEM) which is a significant breakthrough in semiconductor fabrication, simplifying production and significantly reducing costs.	2024
Funding Amount: \$2,000,000		Contact: Ben Wilkinson, 0416 705 535, ben@syenta.com	



Company	Device/System	Description	Year
Hysata Pty Ltd	Next-Generation Water Electrolyser	The electrolyser, now with an optimised membrane component, will deliver the world’s lowest cost green hydrogen with increased output.	2022
Funding Amount: \$1,000,000		Contact: Paul Barrett (CEO), 0413 991 322, paul.barrett@hysata.com	
SiteHive	Real-time Environmental Management	SiteHive has developed a digital, multi-sensor monitor that allows them to make quick, confident decisions from wherever they are, and proactively prevent potential environmental incidents occurring.	2022
Funding Amount: \$1,120,000		Contact: Ben Cooper-Woolley (Co-Founder), 0403 569 818, ben@sitehive.co	
The Yield Technology Solutions (acquired by Yamaha Agriculture, Inc in 2025)	Agrifood Optimisation Platform	The Yield’s ‘Digital Playbooks’ provide land managers with on-farm yield productions and recommendations using AI based on real weather data and the agronomical needs of crops, reducing the impacts of uncertainty created by weather on food waste across the entire food supply chain.	2022
Funding Amount: \$1,780,000		Contact: Ros Harvey (Founder & CEO), 0409 348 264/+1 415 653 2664 (US), ros.harvey@theyield.com	
Zetifi	ZetiLink (Intelligent RF Platform for connected and autonomous vehicles)	ZetiLink is a new platform which uses vehicular radiofrequency (RF) technology and machine learning to actively and intelligently determine the optimal configuration for a vehicle.	2022
Funding Amount: \$1,100,000		Contact: Dan Winson (Founder & CEO), 0410 351 270, dan@zetifi.com	





LLEAF Pty Ltd, 2021



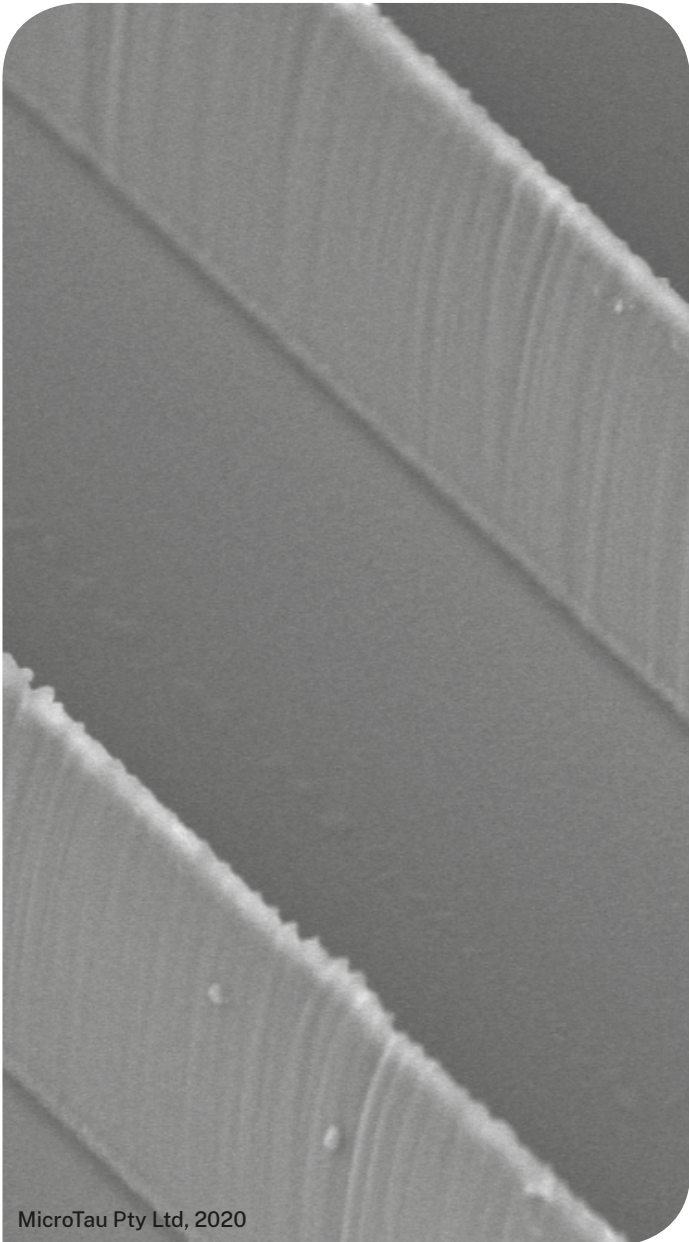
Sensortine Pty Ltd, 2021

Company	Device/System	Description	Year
Defy-Hi Robotics	The BEAR (Building Envelope Access Robot)	The BEAR robotic system is designed to do dangerous, dull and dirty work of cleaning and inspecting high-rise buildings safely.	2021
Funding Amount: \$800,000		Contact: Dr Abbie Widin (Co-Founder), 0407 210 693, abbiew@defyhi.com	
Azaneo/ Growave	Series Wave One	Transforming weed control for farmers, through a modular boom that integrates with any tractor, offering cost-effective and weather-agnostic weed management.	2021
Funding Amount: \$533,000		Contact: Liam Hescock (Founder & CEO), 0428 634 908, liam@azaneo.com	
Hullbot Pty Ltd	The Hullbot One System	The Hullbot One System performs a diverse range of tasks include daily grooming of hulls, 4D inspections and surveys of underwater structures and environmental management.	2021
Funding Amount: \$ 1,058,435		Contact: Tom Loeﬂer (CEO), 0402 810 667, tom@hullbot.com	
Hysata Pty Ltd	Next-Generation Water Electrolyser	Hysata is developing a new type of electrolyser that promises to overcome the limitations of existing electrolyzers and deliver the world’s lowest cost green hydrogen.	2021
Funding Amount: \$500,000		Contact: Dr Gerry Swiegers (CTO), 0414 338 634, gerry.swiegers@hysata.com	
LLEAF Pty Ltd	LLEAF Technology	LLEAF is developing new agricultural film that optimises the use of one of our biggest natural resources, sunlight, to enhance plant growth.	2021
Funding Amount: \$283,480		Contact: Chris Wilkins (CEO), 0492 815 067, chris.wilkins@lleaf.com.au	
Roobuck Pty Ltd	Long-Range High-Rate Wi-Fi System	Roobuck and The University of Sydney are collaborating to commercialise the world’s first long-range high-rate WiFi system compatible with conventional WiFi devices, increasing both productivity and safety.	2021
Funding Amount: \$800,000		Contact: Henry Gong (Co-Founder & CEO), 0431 793 535, henryg@roobuck.com.au	
Sensortine Pty Ltd trading as MPT AgTech	MPT AgTech ‘Smart Seeder’	The MPT AgTech ‘Smart Seeder’ integrates soil moisture sensing technology into a self-adjusting seeder to accurately manage seed placement.	2021
Funding Amount: \$703,590		Contact: David Finlay (Founder & CEO), 0417 920 803, david@moistureplant.com	

Company	Device/System	Description	Year
BioScout	BioScout Automated Airborne Disease Tracking System	An autonomous air sampling unit with an analytic dashboard that can reduce crop disease and damage, increasing yield, by providing farmers with real-time data about the identity, density and location of airborne pathogens in a paddock.	2020
Funding Amount: \$627,000		Contact: Lewis Collins (CEO), 0401 372 535, lewis@bioscout.com.au	
MicroTau Pty Ltd	Direct Contactless Microfabrication (DCM) Printer	Riblet microstructures inspired by shark skin that can be applied to surfaces such as air and marine vehicles for drag-reduction, reducing fuel, cost and CO ₂ emissions.	2020
Funding Amount: \$980,325		Contact: Henry Bilinsky (Founder & CEO), 0402 738 842, henry@microtau.com.au	
Quasar Satellite Technologies	Phased Array Satellite Ground Station as a Service	The phased array satellite communications ground station will be able to communicate with many spacecraft simultaneously, revolutionising the existing service model of one spacecraft at a time per ground station.	2020
Funding Amount: \$1,921,675		Contact: Dr Ilana Feain (Co-CEO), 0411 639 299	
Zetifi	ZetiCell and ZetiRover	The ZetiCell and ZetiRover provide long range, high speed and reliable connectivity for voice calls and internet access in mobile blackspot locations and/or rural and remote communities.	2020
Funding Amount: \$1,471,000		Contact: Dan Winson (Founder & CEO), 0410 351 270, dan@zetifi.com	



Zetifi, 2020



MicroTau Pty Ltd, 2020

Quantum Computing Commercialisation Fund



Carbonix, 2019

Company	Device/System	Description	Year
Carbonix	Domani (25kg Powered Lift Drone)	Australia's first heavy-lifting, long-range powered-lift 'small' fixed wing drone. The Domani will be accessible to the general market for Australian businesses and represent a significant innovation in the global market.	2019
Funding Amount: \$1,473,000		Contact: Philip van der Burg (CEO), 0416 559 052, philip@carbonix.com.au	
Hone	HoneLab and AI Platform	A platform acting as a chemistry lab, HoneLab allows winemakers to make instant decisions about their vintage without having to send the sample to a lab.	2019
Funding Amount: \$837,000		Contact: Mitchell Reece (Financial Controller), 0425 268 496, mitchell.reece@honeag.com	
NextOre Pty Ltd	Magnetic Resonance Analyser	NextOre's magnetic resonance (MR) analysers are sophisticated devices that use bulk ore sorting to produce real-time, accurate measurements of metal concentration in ore while significantly reducing the amount of resources used downstream.	2019
Funding Amount: \$1,070,000		Contact: Chris Beal, 0466 563 122, chris.beal@nextore.com.au	
The University of Newcastle	Hydro Harvester: A Novel Device for Atmospheric Water Generation Using Solar Thermal Energy and/or Waste Heat	A simple, low-cost device enabling the production of water from air, significantly reducing the cost per litre.	2019
Funding Amount: \$330,000		Contact: Prof Behdad Moghtaderi, 02 4033 9062, behdad.moghtaderi@newcastle.edu.au	
UNSW Sydney's SMaRT Centre	SMaRT Microfactory Recycled Glass Panel Line	Reform waste materials into value-added products such as ceramic-based panels for use in the built environment.	2019
Funding Amount: \$790,000		Contact: Anirban Ghose (Head of Microfactories), 02 9065 6413, anirban.ghose@unsw.edu.au	

The NSW Government has strategically invested in a number of initiatives to support the formation of a global quantum ecosystem in NSW, showing thought leadership for the sector including investment in research, infrastructure and skills development.

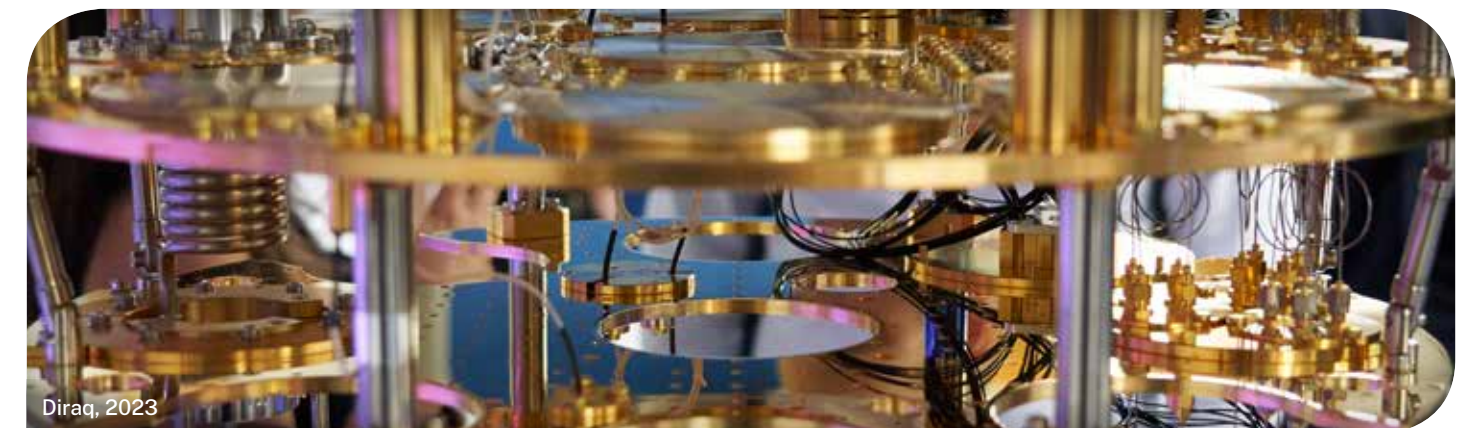
NSW possesses the full complement of quantum computing capabilities, from theory and software to hardware, and is home to one of the largest cohorts of quantum talent internationally.

Quantum computing has been identified under the *NSW 20-Year R&D Roadmap* as a high-value sector where NSW has a competitive advantage.

The NSW Quantum Computing Commercialisation Fund (QCCF) was a \$7 million, single round, competitive technology development and commercialisation program focused on quantum computing funded by the NSW Government.

The QCCF has now concluded.

Company	Device/System	Description	Year
Diraq	Cloud-Accessible Silicon Quantum Processor	Advance towards commercialisation a 10-qubit silicon processor over a three-year period, supporting the company's overall mission to bring an "ultra-powerful quantum computers into existence".	2023
Funding Amount: \$3,004,551		Contact: Prof Andrew Dzurak (Founder & CEO), 0432 405 434, andrew@diraq.com	
Q-CTRL	Delivering value to financial services through hybrid quantum computing	A hybrid quantum computing software as a service solution for the financial sector, helping to solve high-value optimisation problems by neutralising errors prevalent in available hybrid quantum computers.	2023
Funding Amount: \$2,342,202		Contact: Prof Michael Biercuk (Founder & CEO), michael.biercuk@sydney.edu.au	
Quantum Brilliance	Kristal Emulator	A software package that runs on regular classical computers and provides realistic emulation of quantum hardware, allowing users to design quantum algorithms that solve computational problems using the inherent properties of quantum systems (e.g. entanglement).	2023
Funding Amount: \$1,445,000		Contact: Dr Sam Butler (Public Sector Development Lead), 0400 172 172, sam.butler@quantum-brilliance.com	



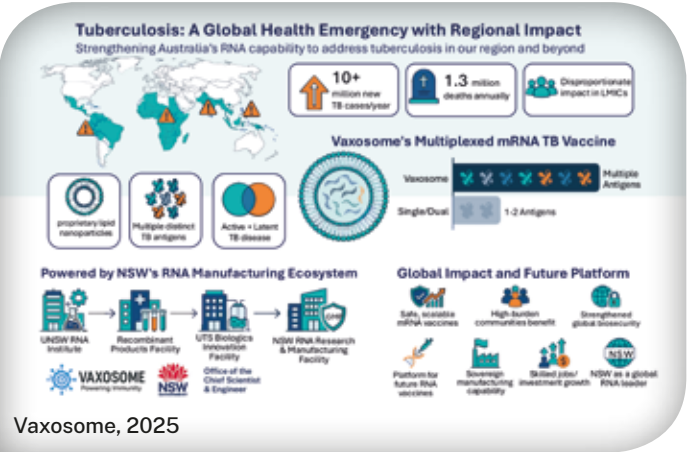
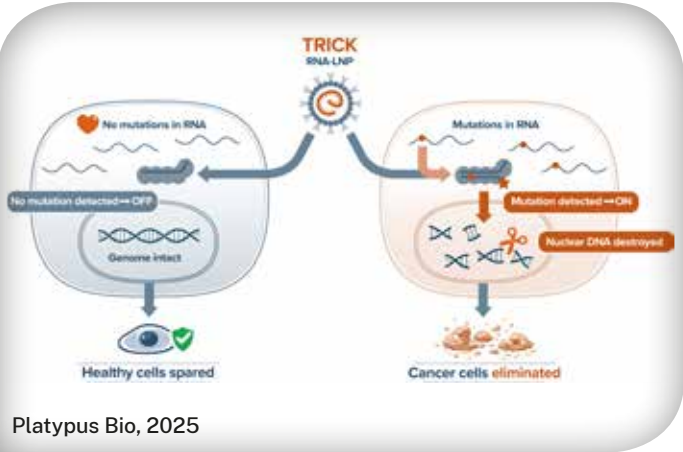
Diraq, 2023

RNA Pipeline Grants

This \$6 million single round, competitive technology development and commercialisation initiative is supporting startups developing innovative RNA-based therapies, vaccines and technologies.

The objective of the program is to help build a robust pipeline of RNA-based products in NSW that have the potential to be manufactured at the RNA Research and Manufacturing Facility, strengthening the pathway from research to real-world impact.

Organisation	Device/System	Description	Year
Platypus Bio Holdings Pty Ltd	TRICK: Trigger RNA Induced Cell Killing as a new therapeutic modality for cancer	An RNA-based cancer treatment that acts like a smart switch within cancer cells, activating only when harmful mutations are present.	2025
Funding Amount: \$1,811,633		Contact: Chris Alma, enquiries@platypusbio.com	
Vaxosome Pty Ltd	A GMP-ready mRNA vaccine for tuberculosis	A novel mRNA vaccine to fight tuberculosis (TB), the world's top infectious killer, which causes over 10 million new cases and 1.3 million deaths annually	2025
Funding Amount: \$2,989,000		Contact: Prof Jamie Triccas, jamie.triccas@sydney.edu.au	



Small Business Innovation & Research Program

The Small Business Innovation & Research (SBIR) program is a competitive phased grants program. The SBIR program involves NSW Government agencies posing challenges they are not able to adequately address with existing approaches or commercially available technologies. NSW small and medium-sized enterprises (SMEs) apply to the SBIR program with their proposed solution. Participating SMEs receive a grant to work with the agency to solve the challenge. At the end of the SBIR program, agencies are encouraged to pilot the technology at scale and consider procurement.

Company	Challenge	Description	Year
Advitech	Waste Recovery and Management Challenge	Modular smart bins that use an AI system to sort waste, provide data and analytics to optimise waste streams, and improve waste collections logistics.	2024
Funding Amount: \$750,000		Contact: Glenn Platt (Executive Director), glenn.platt@emergentgroup.com.au	
Cultural Pulse Tech Group	Cultural and Linguistic Diversity Services Challenge	A Voice-to-text transcription, translation and AI machine learning service that improves multicultural patient experiences during antenatal visits by offering in language support.	2024
Funding Amount: \$750,000		Contact: Reg Raghavan (CEO), reg@culturalpulse.com.au	
Eco Shield Systems	Urban Heat Island Challenge	Porous vertical greening systems to mitigate urban heat and increase biodiversity.	2024
Funding Amount: \$735,067		Contact: Daniel Griffin (Director), daniel@ecoshieldsystems.com	
Rosella St	Recycled Content Verification Challenge	A Digital Product Passport to support purchasing decisions on products containing recycled material and provide links to product directories or purchasing platforms.	2024
Funding Amount: \$350,000		Contact: Mick Fritschy (Co-Founder & Director), hey@rosellastreet.com	
Hi-Vis	School Zones Alerting System Challenge	An edge controller with the capacity to retrofit with the School Zones Alerting System, offering a centralised control system, and analytics to improve safety in school zones.	2024
Funding Amount: \$748,556		Contact: Luke Sasse (LED Product Manager), lukesasse@hivis.com	
Intelligent System Design	Biosecurity Surveillance Challenge	A mobile application equipped with AI to harness citizen surveillance by analysing submitted images to identify exotic pests.	2024
Funding Amount: \$750,000		Contact: Julian van den Berg (CEO), julian@intelligentsystemdesign.com.au	
Future Village (Previously Plantabox)	Urban Heat Island Challenge	A removable, modular garden system to mitigate urban heat and provide a flexible system for urban greening.	2024
Funding Amount: \$492,942		Contact: Ben Perry (Design Director), ben@plantabox.com.au	
QBL Media	Cultural and Linguistic Diversity Services Challenge	Voice-to-text transcription, translation and analysis software to facilitate real time multi-language communication during antenatal visits and the multicultural patient experience.	2024
Funding Amount: \$749,883		Contact: Tat Banerjee (MD), tbanerjee@videotranslator.ai	

Company	Challenge	Description	Year
Tensile Constructions	Urban Heat Island Challenge	A Modular cooling system designed to mitigate urban heat by creating a green solution utilising plant shade, transpiration cooling, and ceramic coated steel to shade car spaces.	2024
Funding Amount: \$120,000		Contact: Peter Bottero (MD), pbottero@tensile.com.au	
3rd Axis	PPE Challenge	Patented 3D-printed ceramic extrusion technology to recycle plastic waste such as PPE into high value filament cord used as feedstock in 3D printing.	2021
Funding Amount: \$1,000,000		Contact: Ashish Jain (Director), 0458 557 517, ash@3rdaxis.com.au	
Advanced Navigation	Hyperlocal Navigation Challenge	Advanced Navigation's technology provides accurate location information within NSW transport hubs for users with vision impairments.	2021
Funding Amount: \$1,000,000		Contact: Christopher Shaw (CEO), 02 0900 3800, chris.shaw@advancednavigation.com	
AusAir	PPE Challenge	A range of biodegradable surgical respirators, masks and gowns to address excessive waste from discarded PPE.	2021
Funding Amount: \$882,865		Contact: Isaac Honor (Director), 0404 433 859, isaac@ausmark.com	
BindiMaps	Hyperlocal Navigation Challenge	Provides wayfinding and navigation services in complicated indoor and outdoor spaces for users with disabilities.	2021
Funding Amount: \$1,000,000		Contact: Dr Anna Wright (Co-Founder & CEO), 0412 006 427, anna@bindimaps.com	
Biodiversity Monitoring Services	Koala Count Challenge	Novel, bio-inspired acoustic sensing technology that will be used to create a more active, targeted and efficient monitoring device for koala calls.	2021
Funding Amount: \$999,940		Contact: Andrew Lothian (Director & Principal Ecologist), 0421 841 726, andrew.lothian@biodiversitymonitoring.com.au	
Infinite Water	Water Purification Challenge	A water recycling system which removes plastic microfibres from laundry wastewater.	2021
Funding Amount: \$971,227			
Innovations for Humanity	Connectivity Challenge	A low-cost user terminal antenna system that will provide high data rate connectivity from a range of current and emerging satellite constellations.	2021
Funding Amount: \$1,000,000		Contact: Karu Esselle (Director), 0423 034 302, karu.esselle@uts.ed.au	
Ninox Robotics	Koala Count Challenge	Long-range drones with advanced thermal imaging cameras to accurately monitor koalas over large and previously inaccessible areas across the state.	2021
Funding Amount: \$980,350		Contact: Marcus Ehrlich (MD), 0408 991 563, marcus.ehrlich@ninox-robotics.com	
PEGRAS	Water Purification Challenge	PEGRAS provides at-the-source treatment of sewage from industrial processes. It traps nano and microplastics and other suspended particles.	2021
Funding Amount: \$1,000,000		Contact: Ian Byrne (Director), 0419 876 416, ian.byrne@pegras.com	
Zetifi	Connectivity Challenge	A suite of solar-powered wireless network devices and systems that use long range Wi-Fi to provide coverage in low population density areas.	2021
Funding Amount: \$997,500		Contact: Dan Winson (Founder & CEO), 0410 351 270, dan@zetifi.com	



