



ATC16 SEMI-FINALISTS

Company	State	Technology
Advanced Fertigation Systems	WA	Advanced Fertigation Systems provides a cost-effective water and nutrient management platform, SWAN (Scheduling Water And Nutrients), that helps to manage water resources, allocations and nutrient inputs precisely and to plan.
Aeration Control Australia	WA	Aeration Control Australia provides unmatched management of grain in storage by providing of aeration at the right temperature and humidity in order to improve the grain condition.
Aglive	VIC	Aglive has developed a system and method for digital supply chain traceability that has significantly enhanced tracking of red meat from farmer to end consumer.
Airtopia	VIC	Airtopia is an air conditioning controller that integrates seamlessly with any IR (infra-red) controlled split systems allowing Building Management Systems to fully mimic the original remote control and transforming the process of air conditioning automation.
Aquamation Equipment	VIC	Aquamation's Water Cremation technology uses water instead of propane gas fired incineration to cremate bodies that reduces energy use, emissions, toxic fumes and airborne mercury pollution.
Axis Energy Group	QLD	Axis Energy Group's vertical axis wind turbine is particularly suited to the low and turbulent flows encountered urban environments and features novel slanting blades that enhance its start-up capabilities, minimise vibrations levels and eliminate power fluctuation.
Conflux Technology	VIC	Conflux Technology uses metal Additive Manufacturing (3D printing) to produce a smaller, lighter and more efficient heat exchanger with intricate geometry and a high surface area density.
Conveyor Manufacturers Australia (CMA)	NSW	Conveyor Manufacturers Australia's REDLINE Conveyor System is a mono-rail mounted conveyor system that can be advanced and retracted into position via a pneumatic/hydraulic drive system.
Core Resources	QLD	Core Resources' Toowong Process is a novel technology enabling the removal of toxic contaminants from mineral concentrates produced by mines and fix them in an environmentally stable and non-toxic form.
Cortical Dynamics	WA	Cortical Dynamics has developed a disruptive Brain function monitor, the Brain Anaesthesia Response (BAR) monitor, that better detects the effect of anaesthetic agents on brain activity and aids optimal anaesthetisation.
CryptoPhoto	QLD	CryptoPhoto provides better authentication and makes it fast and easy for ordinary people to login and use the internet safely, protecting against phishing scams, social engineers, fake web sites and similar attacks, even if the user is unsophisticated or unmotivated.
Cubic QED	NSW	Cubic QED's process captures and transforms mineral salts from the discharge water of reverse osmosis desalination into mineral carbonates that become valuable commercial minerals.
Elexon Mining	QLD	Elexon Mining's Cave Tracker System provides underground mine operators with the ability to measure movement in the underground ore body in near-real time to improve mine safety and productivity.
Energy Made Clean	WA	Energy Made Clean's Solar Construction offers integrated solutions to complex energy challenges including off grid power, utility and commercial scale solar, water pumping systems and lithium battery storage system.
Fulcrum 3D	NSW	Fulcrum 3D's CloudCAM is an advanced sky imaging system which utilises a ground-mounted fisheye camera together with advanced image processing to identify, categorize, track and predict cloud movement over solar photovoltaic power plants.
Gamechanger Technologies	VIC	Gamechanger Technologies VForce® Compound Motion technology for wind turbines and other airfoils provides variable angle of deflection and extension (morphing) that other systems cannot achieve.
Greenland Systems	VIC	Greenland Systems' Evacuated Tube Solar Thermal collector is capable of efficiently raising the temperature of a Heat Transfer Fluid to 200C for direct applications for industry.
Heat Trap Solar	WA	Heat Trap's Emergency Safety Shower Chiller cools unsafe incoming hot water making safety shower and/or eye baths safe to use.
HMS Group of Companies Australia	NSW	HMS Group's remote controlled mini loader for open cut mines or underground mines is designed to safely collect the coal that drops from the conveyor belt whilst the belt is still operating.
Imunexus	VIC	Imunexus improves the cancer killing ability of existing antibody drugs by quickly and easily creating bispecific biobetter versions using small antibody-like modules called "Imunexins" that can be engineered to bind to any specific target.
Independent Products	VIC	Independent Products' uses the waste-water created by air conditioners to improve energy efficiency by up to 40% and can be retrofitted to most of the world's split system air conditioning and refrigeration units.



**AUSTRALIAN
TECHNOLOGIES
COMPETITION**

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Long Pipes	WA	Long Pipes' Fluid Highway is a continuous joint-free pipe, produced at 20kms/day using composite pipe technology cured onsite to provide the lightest, strongest, toughest, fastest to install, longest lasting, cheapest solution for long distance transportation of gases and fluids.
MAKO Turbines	NSW	MAKO Turbines' tidal technology has been designed to produce predictable/baseload renewable electricity from free-flowing water in tides, rivers, canals, inter-island channels or tailraces of hydro dams around the world.
Medical Safety Systems	NSW	Medical Safety Systems' RiskMx continuously monitors pathology and other patient-level data using pre-defined algorithms that provide the basis for automated, real-time, healthcare practitioner-friendly Risk Management Plan implementation.
Micronised Mineral Solutions	NT	Micronised Mineral Solutions has developed a solution that enables faster and more efficient decontamination of toxic mine water through the removal of 99.8% of dissolved metals and the re-balancing of water pH to meet environmental requirements.
Ozius Spatial	QLD	Ozius Spatial's Naxia Land Management Tools are a suite of spatial information tools derived from remote sensing analytics and used for environmental monitoring and land management.
Reservoir Rock Technologies	WA	Reservoir Rock Technologies has developed a highly efficient automated imaging, computer based process for analysis of core samples in the oil and gas industry.
SCT Operations	NSW	SCT Operations' ANZI cell is a device that measures the three dimensional in situ stresses in rock, a key parameter in mining, tunnelling, and related industries.
Secure Code Warrior	NSW	Secure Code Warrior is a web-based gamified skills development and assessment platform that mimics real-life security vulnerabilities in software code, provides instant learning opportunities for developers to locate, identify and fix these vulnerabilities.
StabilCo	NSW	StabilCo's MatrixMaterials provide an innovative roadbase-and-rail infrastructure solution from waste by capitalising on scientifically designed and engineered material properties to deliver improved performance and cost benefits to both infrastructure owners and the environment.
Stochastic Simulation	WA	Stochastic Simulation's ResAssure is a revolutionary reservoir simulation tool for the upstream oil and gas industry that enables the industry to confidently make development decisions with previously unmatched confidence and speed.
SunSHIFT	NSW	SunSHIFT is a pre-engineered, pre-fabricated, moveable turnkey solar-PV solution specifically designed to overcome the limitations of traditional solar-PV and enable new users, such as miners, to adopt alternative energy.
SupraG Energy	VIC	SupraG Energy is a graphene technology commercialization company which develops next-generation high-energy-density energy storage devices, including supercapacitors, for power management and transportation applications.
Taggle Systems	NSW	Taggle Systems builds and operates a low power wide area radio network enabling the highly efficient collection of vast amounts of data from connected devices such as water meters.
V2H International	QLD	V2H International has developed innovative lateral drilling technology using high pressure water jetting for the global oil and natural gas industry that radically enhances the hydrocarbon production of new and existing wells.
Vectus Biosystems	NSW	Vectus Biosystems has developed a platform technology that allows the production of small molecules that mimic the activity of the vasoactive intestinal peptide (VIP), allowing construction of more than 70 compounds with anti-hypertensive and/or anti-fibrotic properties.
Wattwatchers	NSW	Wattwatchers has developed the ultra-compact Auditor series of internet appliances for energy that deliver accurate, real-time energy management over the internet independently of regulated billing meters and equipment manufacturers' monitoring systems.
Worldpoly	VIC	Worldpoly's Australian PolyForce technology provides automated, safe and consistent welding of HDPE pipe systems using current hydraulics and electronic controls and designed for remote and rugged use.