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## LU7 AND MACQUARIE UNIVERSITY APPLY FOR AEA IGNITE GRANT FOR ADVANCED SOLAR PANEL RECYCLING PROJECT

### Highlights

- Application for approximately \$386,000 for AEA Ignite Grant under the Department of Education's Australia's Economic Accelerator program
- Collaborative partnership between Macquarie University (lead) and Lithium Universe Limited (ASX:LU7)
- Project aims to revolutionise solar panel recycling by integrating Microwave Joule Heating Technology (MJHT) and Jet Electrochemical Silver Extraction (JESE)
- Focus on recovering high-purity silver (>96%), intact glass, and recyclable silicon wafers, creating new value streams
- Expected to advance technologies from TRL 4 to TRL 6, demonstrating a scalable pilot prototype
- If successful, partner support of cash and in-kind support – total project is \$884,000 for 12 months
- Application has no guarantee of being successful
- Positions Australia as a global leader in clean energy circular economy solutions

Lithium Universe Limited (ASX: LU7, "Lithium Universe" or "the Company") is pleased to announce that, together with Macquarie University, it has applied for the Australia's Economic Accelerator (AEA) Ignite Grant by the Department of Education. If successful, the grant will support the development of an integrated recycling prototype for end-of-life solar panels, combining Macquarie's patented Microwave Joule Heating Technology (MJHT) with the breakthrough Jet Electrochemical Silver Extraction (JESE) process.

The key objectives of the project are to develop microwave-assisted delamination (MJHT), implement jet electrochemical silver recovery (JESE), and integrate both technologies into a pilot prototype.

The combined MJHT-JESE approach is expected to transform recycling economics by delivering multiple technical breakthroughs. First, the process preserves wafer integrity, enabling their reuse in high-value applications rather than being lost to waste streams. It also dramatically shortens processing times, taking minutes instead of hours or even days. In addition, the method reduces chemical intensity by operating with dilute acids rather than relying on toxic leachants, improving both safety and sustainability. The system incorporates closed-loop electrolyte recirculation, ensuring zero waste generation. Finally, it produces high-purity metallic silver that can be directly reused in photovoltaic cells and electronic components, creating strong commercial and environmental advantages.

The grant if successful, will provide vital resources to accelerate the project from laboratory validation (TRL 4) to a scalable pilot prototype (TRL 6), positioning Australia at the forefront of global solar panel recycling efforts. The 12-month project is divided into two phases: Phase 1 (Q1–Q2) will focus on R&D, prototyping MJHT, and validating JESE, while Phase 2 (Q3–Q4) will concentrate on integrating MJHT and JESE into a pilot system.

This project aligns with multiple Australian Government priorities, including the advancement of renewables and low-emission technologies, the development of critical and strategic minerals processing, and the achievement of national net-zero commitments.

The total grant application amounts to \$385,728, supported by additional contributions from project partners. Macquarie University will provide \$39,700 in cash and \$187,306 in-kind, while Lithium Universe will contribute \$100,000 in cash and \$171,600 in-kind. If the application is successful, the combined value of grant funding and partner contributions will total \$884,334 for 12 months commencing January 2026. The outcome of the application is expected by the end of December 2025, and there is no certainty of approval. In the meantime, Lithium Universe (LU7) will continue to fund ongoing research and development costs of \$100,000 over the next six months.

### **Executive Commentary**

LU7 Executive Chairman, Iggy Tan, stated: *“This grant application validates the global importance of our partnership with Macquarie University. With silver shortages looming and solar waste rising, the timing could not be more critical. The integration of MJHT and JESE is a breakthrough solution that recovers critical resources with speed, efficiency, and environmental integrity. The success in grant will allow us to accelerate toward pilot demonstration and future commercialisation. We believe this project not only positions Australia as a leader in clean energy recycling but also strengthens LU7’s dual-track strategy across lithium and photovoltaic recycling.”*

Authorised by the Chairman of Lithium Universe Limited



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**Forward-looking Statements**

This announcement contains forward-looking statements which are identified by words such as 'anticipates', 'forecasts', 'may', 'will', 'could', 'believes', 'estimates', 'targets', 'expects', 'plan' or 'intends' and other similar words that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward-looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as of the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors, and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will occur and readers are cautioned not to place undue reliance on these forward-looking statements. These forward-looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed, or anticipated in these statements.

## **ABOUT LITHIUM UNIVERSE LIMITED**

Lithium Universe Limited (ASX: LU7) is a forward-thinking company on a mission to close the "Lithium Conversion Gap" in North America and revolutionize the photovoltaic (PV) solar panel recycling sector. The company is dedicated to securing the future of green energy by addressing two major strategic initiatives: the development of a green, battery-grade lithium carbonate refinery in Québec, Canada, and pioneering the recycling of valuable metals, including silver, from discarded solar panels.

### **Lithium Strategy: Closing the Lithium Conversion Gap**

Lithium Universe is at the forefront of efforts to meet the growing demand for lithium in North America. As electric vehicle (EV) battery manufacturers prepare to deploy an estimated 1,000 GW of battery capacity by 2028, the need for lithium is expected to rise dramatically. However, with only a fraction of the required lithium conversion capacity in North America, LU7 is determined to play a pivotal role in reducing dependence on foreign supply chains. The company is building a green, battery-grade lithium carbonate refinery in Bécancour, Québec, leveraging the proven technology developed at the Jiangsu Lithium Carbonate Plant. This refinery will produce up to 18,270 tonnes per year of lithium carbonate, focusing initially on the production of lithium carbonate for lithium iron phosphate (LFP) batteries. The refinery's smaller, off-the-shelf plant model ensures efficient operations and timely implementation, positioning LU7 as a key player in the emerging North American lithium market. With a strong leadership team, including industry pioneers like Chairman Iggy Tan, LU7 is well-positioned to deliver this transformative project. The company's strategy is counter-cyclical, designed to build through the market downturn and benefit from the inevitable recovery, ensuring sustained exposure to the growing lithium demand.

### **PV Solar Panel Recycling Strategy: Silver Extraction**

As the global demand for solar energy expands, the issue of solar panel waste has grown exponentially. With an estimated 60–78 million tonnes of solar panel waste expected by 2050, the need for efficient recycling solutions is more critical than ever. Lithium Universe has responded by acquiring the Microwave Joule Heating Technology (MJHT) from Macquarie University, a groundbreaking innovation for extracting valuable metals from discarded PV solar panels. The company's first focus is on the recovery of silver, a critical component in solar panel manufacturing. Silver's excellent electrical conductivity makes it indispensable in photovoltaic cells, where it forms the electrical contacts for electricity flow. The technology developed by LU7 enhances the extraction of silver, silicon, gallium, and indium, addressing a major gap in the recycling industry. With the price of silver soaring due to increasing demand in solar and electronics, LU7's efforts in silver recovery are timely and essential for sustaining the global clean energy supply chain. This breakthrough technology significantly reduces the environmental impact of solar panel waste by offering a more efficient, cost-effective, and environmentally friendly recycling solution. As the company progresses, it plans to expand its focus to other critical metals like copper and indium, ultimately contributing to the global circular economy.

Lithium Universe is committed to ensuring that both its lithium and PV solar recycling strategies help meet the world's growing demand for clean energy, while offering a sustainable solution to the challenges of resource scarcity and waste management.