

7 November 2025

# LU7 EXECUTES MOU WITH REPV TECH, INC. OF TAIWAN FOR CO-OPERATION AND SUPPLY OF SILICON WAFERS FOR SILVER EXTRACTION TESTING

## Highlights

- Lithium Universe signs MOU with Taiwan's RePV Tech to advance PV recycling collaboration
- Partnership integrates RePV Tech's delamination process with LU7's MJHT and JESE silver extraction systems
- RePV Tech to supply recycled silicon wafers for testing at Macquarie University laboratories
- Joint trials target recovery of high-purity "Britannia-grade" silver from PV waste
- Collaboration ensures shared data, IP protection, and future commercialisation pathway
- Supports global circular economy by transforming solar waste into valuable metal resources

Lithium Universe Limited (ASX: LU7) ("Lithium Universe" or "the Company") is pleased to announce that it has signed a Cooperation Memorandum of Understanding (MOU) with RePV Tech, Inc. (RePV Tech), a leading photovoltaic (PV) recycling company based in Hsinchu, Taiwan.



RePV Tech, established under the licence from the Industrial Technology Research Institute (ITRI), is at the forefront of solar module recycling. The company has developed its own "easy dismantling" process that separates glass from silicon wafers, offering a different approach to Lithium Universe's Microwave Joule Heating Technology (MJHT) used for PV delamination. In addition, RePV Tech recovers various valuable materials from discarded solar cells, supporting a truly circular solar economy.

Under the MOU, RePV Tech will supply Lithium Universe with representative quantities of silicon wafer material obtained from its recycling operations. This material will be tested using LU7's MJHT and JESE systems at Macquarie University to evaluate recovery efficiency and process integration. The two companies will jointly analyse data, optimise extraction performance, and assess the feasibility of scaling up to pilot or commercial facilities. The agreement also covers intellectual property protection, data ownership, and confidentiality obligations, ensuring that each party retains its existing IP while jointly owning new results generated through collaboration. Under the collaboration, both companies will share technical knowledge and explore complementary opportunities as part of an international partnership.

This non-binding MOU will remain in effect for twenty-four months and serves as a strategic foundation for building a global PV recycling value chain. It reflects both parties' shared commitment to advancing circular economy principles and environmental sustainability in renewable energy materials.

The trials will be conducted at Macquarie University in Sydney, where Lithium Universe's research team is advancing the Jet Electrochemical Silver Extraction (JESE) process — a cleaner and more energy-efficient alternative to traditional hydrometallurgical methods. The aim is to assess whether JESE can recover high-purity "Britannia-grade" silver (95.95% purity) from RePV Tech's silicon wafers.

### **FOCUS ON SILVER EXTRACTION**

Silver remains one of the most valuable components in crystalline-silicon PV panels. At current market levels (~US \$52.21 per ounce in October 2025), each discarded module may contain approximately A\$56 worth of recoverable silver. As global PV installations surge, waste volumes are projected to exceed 70 million tonnes by 2040, representing an untapped resource valued in the tens of billions of dollars.

#### **Comment from RePV Tech's Founder and Chairman Dr. Alex Peng**

*"We're excited to partner with Lithium Universe and contribute our experience in PV recycling to this groundbreaking initiative," said Dr. Alex Peng, CEO of RePV Tech, Inc. "By combining our wafer recovery expertise with LU7's innovative silver-extraction technology, we can accelerate sustainable solutions for the global solar industry's growing end-of-life challenge."*

#### **Comment from Lithium Universe Executive Chairman Iggy Tan**

*"This collaboration with RePV Tech represents a strategic alignment of complementary technologies. By integrating RePV's proven PV module recycling expertise with our innovative silver extraction systems, we can accelerate commercial development and advance circular economy outcomes. It's an exciting step toward sustainable recovery of valuable materials from solar waste worldwide".*

Authorised by the Chairman of Lithium Universe Limited



### Lithium Universe Interactive Investor Hub

Engage with Lithium Universe directly by asking questions, watching video summaries and seeing what other shareholders have to say about this, as well as past announcements, at our Investor Hub <https://investorhub.lithiumuniverse.com/>

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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.

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## **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, solar panel waste is projected to reach 60–78 million tonnes by 2050, making efficient recycling solutions critical. Lithium Universe has responded by acquiring Macquarie University's Microwave Joule Heating Technology (MJHT) and Jet Electrochemical Silver Extraction (JESE) method, a breakthrough in recovering valuable metals from end-of-life PV panels.

Recent laboratory trials confirmed JESE's exceptional efficiency, achieving more than 95% in 30 minutes, under mild conditions of 5 V and dilute nitric acid. Crucially, the process preserves intact silicon wafers, creating secondary value streams for reuse in solar-grade or nano-silicon applications. Equally significant, JESE has demonstrated high-purity silver recovery. Tests yielded 95.95% silver purity within five minutes—comparable to Britannia-grade silver, a premium alloy above sterling (92.5%) and close to bullion standard (99.9%).

Impurities were limited to just 4.05%, with aluminium and oxygen as the main trace elements, far outperforming conventional bath recovery, which produced only 78.6% silver with over 21% impurities. With silver demand surging in solar and electronics, LU7's technology offers a timely, sustainable, and commercially attractive solution. Looking ahead, the Company plans to expand recovery to other critical metals, further strengthening its role in 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.