Lithium Universe LIMITED
Building a Lithium Future

ASX ANNOUNCEMENT AND MEDIA RELEASE

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LU7 US SITE ASSESSMENT VISIT ALIGNS WITH SILVER'S NEW STATUS AS U.S. CRITICAL METAL

Highlights

- U.S. formally classified silver as a Critical Metal for the first time
- U.S. now faces an emerging structural deficit in high-purity silver supply
- Silver demand from solar exceeded 200 million ounces annually
- LU7 positioned to recover high-purity silver from end-of-life PV panels
- U.S. PV waste projected to reach 10 million tonnes by 2050
- Only ~10% of U.S. retiring PV panels are currently recycled
- LU7 management visited several potential sites in Texas, USA
- Policy alignment strengthens commercial, strategic, and funding opportunities for LU7

Lithium Universe Limited (ASX: LU7) ("Lithium Universe" or "the Company") is pleased to announce the advancement of its U.S.-focused PV recycling and silver recovery strategy following the recent decision by the United States Government to formally classify silver as a Critical Metal. This landmark policy shift, the first time in history that silver has been elevated to critical status, reinforces the importance of developing secure, domestic supply chains for the metals essential to America's energy transition, manufacturing resilience, and national economic security.

SILVER OFFICIALLY CLASSIFIED AS A U.S. CRITICAL METAL

The U.S. Government's decision was motivated by silver's irreplaceable conductivity, antimicrobial properties, and unique role in photovoltaic cells. As referenced in recent market analyses, approximately 200 million ounces of silver are consumed annually by the solar industry alone, contributing to an ongoing global deficit. With new stockpiling programs, industrial consumption growth, and rising investment demand, silver prices are forecast to remain elevated in the medium term. This dynamic reinforces the economic attractiveness of high-efficiency recovery through LU7's recycling technologies.

LU7'S PROPRIETARY MJHT AND JESE TECHNOLOGIES PROVIDE UNIQUE STRATEGIC ADVANTAGE

Lithium Universe is uniquely positioned to help address this challenge through its proprietary Microwave Joule Heating Technology (MJHT) and Jet Electrochemical Silver Extraction (JESE) processes, two innovations that

make the Company one of the few global entities focused specifically on economically recovering high-purity silver from end-of-life photovoltaic solar panels. As solar installations expand across the United States, a parallel wave of PV waste will accelerate sharply from the early 2030s onward. Texas, now the largest utility-scale solar state in America, is uniquely positioned to generate one of the country's largest long-term PV waste streams. This massive future volume creates a strong commercial foundation for LU7's technology deployment.

SURGING U.S. SOLAR INSTALLATIONS SET STAGE FOR MASSIVE PV WASTE VOLUMES

According to the United States Environmental Protection Agency (EPA), the U.S. may have around 1 million tonnes of solar-panel waste by 2030, and the National Renewable Energy Laboratory (NREL) projects this could grow to approximately 10 million metric tonnes by 2050. A 2024 review paper further estimates that between 2025 and 2050, the U.S. could generate about 1.08 billion waste PV modules. Yet, as highlighted by a 2023 Yale Environment 360 report, only around 10% of retiring panels in the U.S. are currently recycled, largely because landfill disposal remains cheaper than recycling.

LU7 COMPLETED STRATEGIC SITE ASSESSMENT AT VARIOUS TEXAS SITES

Against this backdrop, Lithium Universe confirmed that its senior management team had recently visited several Texas sites for the establishment of the Company's U.S. PV recycling and silver-recovery facility. One of those sites was our previously announced target in the Port of Brownsville, Texas. The other site was located near Houston, Texas. **LU7's management team assessed potential sites** that could accommodate a phased build-out, starting with a pilot-scale MJHT and JESE demonstration module before scaling to a full commercial facility capable of **4 tonnes per hour of PV throughput.** The sites offered sufficient space for delamination halls, silver-extraction circuits, material-handling systems, storage yards, and future expansion cells.

ALIGNMENT BETWEEN U.S. POLICY DIRECTION AND LU7'S SILVER-RECOVERY STRATEGY

The alignment between the U.S. Government's new silver policy direction and LU7's recycling strategy is highly compelling. Silver's elevation to the Critical Minerals List represents a decisive acknowledgement of the material's dual importance: as a precious metal valued for investment, and as an irreplaceable industrial input for solar photovoltaics, electronics, electric vehicles, medical devices, and numerous high-performance applications. With industrial consumption rising and mine supply growing only marginally, the United States faces a growing structural deficit in the metal most essential to solar manufacturing and advanced technology systems.

Executive Chairman Iggy Tan commented: "*Silver's new designation as a U.S. Critical Mineral comes at the perfect time for Lithium Universe. Our PV recycling strategy, built around high-efficiency silver recovery, aligns directly with America's need to strengthen domestic supply chains for energy-transition materials. We are positioning LU7 to play a significant role in the future circular economy for solar materials in North America*."

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Authorised by the Chairman of Lithium Universe Limited

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For Information:

Iggy Tan
Executive Chairman
Lithium Universe Limited
Email: info@lithiumuniverse.com

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 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) ("Lithium Universe" or "the Company") 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.

SILVER EXTRACTION - PV SOLAR PANEL RECYCLING STRATEGY

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. Silver is essential for solar panels, electronics, and electric vehicles due to its unmatched electrical conductivity. Industrial demand has surged, especially from photovoltaics and AI technologies, creating a global supply deficit. With production lagging, silver prices have soared to record highs above US $50 per ounce, reinforcing the economic importance of efficient recycling.

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. The first stage, developed by Macquarie University, is Microwave Joule Heating Technology (MJHT), a process that uses microwave energy to selectively heat silicon cells softening the ethylene vinyl acetate (EVA) encapsulant that binds a solar panel's layers. This enables room-temperature delamination of glass, silicon, and metal layers without crushing, furnaces, or toxic chemicals. The result is a clean separation of materials, drastically reducing energy use, emissions, and chemical waste while preserving the integrity of high-value silicon and silver components. Following delamination, Lithium Universe applies its Jet Electrochemical Silver Extraction (JESE) process, a micro-jet electrochemical system that directs a fine stream of dilute nitric electrolyte onto the silver pads of solar cells. This method achieves over 95% silver recovery at 96% purity, while using 83% less acid and no chemical additives. The process operates at just 5 volts, recycles its electrolyte, and produces zero heavy-metal waste, establishing a true closed-loop recycling system. Together, MJHT and JESE form a sustainable, scalable recycling platform that converts discarded solar panels into a renewable source of silver, silicon, and other critical materials, a vital step toward circularity in the global clean-energy supply chain.

LITHIUM DIVISION

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.

Second Refinery Strategy

Lithium Universe Limited has launched a second lithium refinery strategy in Brownsville, Texas, complementing its flagship Bécancour project in Québec. The initiative creates a binational refining platform to address North America's lithium conversion shortage and strengthen supply chain resilience. Strategically located near the Port of Brownsville, the site offers deep-water access, low labour costs, and streamlined permitting within one of the U.S.'s most business-friendly regions. Leveraging a "copy and paste" design from the proven Bécancour refinery, the Texas project can be rapidly deployed to serve nearby gigafactories, aligning with U.S. policy incentives under the Inflation Reduction Act.