



PRESS RELEASE

SOLARCYCLE® Awarded DOE Grant to Study Solar Panel Metal Refinement Process

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Oakland, CA / April 20 – [SOLARCYCLE®](#), a tech-driven recycling company focused on producing sustainable materials at scale for the solar industry, today announced that the U.S. Department of Energy has [awarded](#) the company a \$1.5M research grant to study the process for recovering higher-quality metals and materials extracted from retired solar panels.

SOLARCYCLE and the National Renewable Energy Laboratory (NREL), who received additional funding for the research, will conduct the project over a two-year grant period.

Through its current technology, SOLARCYCLE can recover 95% of the valuable materials in a decommissioned solar panel, like silver, silicon, copper, aluminum, and glass. This research will develop and test alternative refinement processes to better recover and separate solar metals and materials, which will increase the ability for refined materials to be widely used in domestic solar manufacturing.

“To meet the growing needs of the US solar market, SOLARCYCLE is working to help build a domestic supply chain in order to be more resilient amidst global supply chain ebbs and flows,” said Dr. Pablo Dias, lead researcher and Chief Technology Officer at SOLARCYCLE. “With support from the Energy Department, we will research how to maximize the value of recycled materials, while bringing down the cost of recycling to better compete with the unsustainable practice of landfilling old solar panels.”

Demand for solar panels in America is on the rise, in part, due to the Inflation Reduction Act, which extended and increased the number of tax credits for solar projects and manufacturing. However, the global supply of solar panels remains constrained, both due to trade barriers and the lingering impacts of the pandemic on the supply chain.

In 2022, NREL [found](#) that with modest government support, recycled materials can meet at least 25-30% of domestic solar manufacturing needs in the United States by 2040. SOLARCYCLE and NREL will collaborate to examine whether an advanced material refinement process is economically, environmentally, and technologically feasible to meet upcoming domestic manufacturing demands.

“While recycling solar panels has received a lot of attention, how we process and reuse the recycled materials is just as critical for building a circular economy for the fastest growing energy source in the US,” said Garvin Heath, Principal Environmental Engineer and Distinguished Member of Research Staff at NREL. “The research NREL will conduct with SOLARCYCLE will help us to better understand the environmental and economic feasibility of their novel process, working alongside their R&D team to minimize both costs and environmental impacts while maximizing revenue.”

The U.S. Department of Energy Solar Energy Technologies Office awarded SOLARCYCLE and NREL the research grant under funding from the Bipartisan Infrastructure Law.

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The grant announcement follows a founding year in which SOLARCYCLE [closed their Series A](#), opened their first, advanced-technology solar recycling facility in Odessa, Texas, and inked customer partnerships with major US solar companies, including [Sunrun](#), [Silicon Ranch](#), [DEPCOM Power](#), [SOLV Energy](#), [NovaSource](#), [Greentech Renewables](#), and [Forum Energy Partners](#).

About SOLARCYCLE

[SOLARCYCLE](#) is a technology-driven platform designed to maximize solar sustainability by offering solar asset owners a low-cost, eco-friendly, comprehensive process for recycling retiring solar panels and technologies and repurposing them for new uses. The company’s proprietary technology allows it to extract 95% of a solar panel’s valuable materials, such as silver, silicon, copper and aluminum, and to recycle or repurpose panels currently in use. Experts in solar technology, recycling and sustainability founded SOLARCYCLE in 2022 to accelerate the circular economy for solar and renewables. www.SOLARCYCLE.us

About the Solar Energy Technologies Office

The U.S. Department of Energy Solar Energy Technologies Office accelerates the advancement and deployment of solar technology in support of an equitable transition to a decarbonized economy. Learn more energy.gov/eere/solar.



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