

## **ColorFuLead Power Wins Two Awards in the Third Retired Wind and Solar Equipment Recycling Design Competition**

The results of the Third Design Competition for the Recycling of Retired Wind and Solar Equipment were recently unveiled. The competition, jointly sponsored by the Department of Industry and Information Technology of Gansu Province and the Professional Committee on Recycling of Wind and Photovoltaic Power Generation Equipment of the China National Resources Recycling Association, highlighted innovative approaches to sustainable energy solutions. Among the notable winners, ColorFuLead Power (Beijing) Technology Co., Ltd. ("ColorFuLead Power") stood out with two designs being selected. The "Application of Colorful Solar Cell Microlayer Manufacturing Technology in the Reuse of Color Solar Cell Modules" project won the first prize for technological innovation. The "Application of Color Solar Cell in the Dazu Rock Carvings Service Area of Chongqing-Chengdu Expressway" won the "Annual Demonstration Project" award. This project is a "Color Solar Cell + Expressway" project, which focuses on integrating solar technology into China's largest traffic energy systems. The two awards highlighted ColorFuLead Power's innovative capabilities in recycling color solar cells. ColorFuLead Power's proprietary colorful microlayer technology (CMT) is a key competitive asset in the power industry. The establishment of the first production line using this technology in Zhangjiawan Town, Tongzhou District, Beijing marks a significant milestone. Utilizing CMT and advanced intelligent equipment with core algorithms, this production line can upgrade various types of photovoltaic modules, including retired solar cells, into colorful solar cells with high transparency and no thermal spot effect. These upgraded products are versatile and can be used in construction, commerce, advertising, municipal projects, emergency facilities, and other applications. CMT extends the lifespan of solar cells, allowing photovoltaic materials to visually integrate with buildings and the environment, achieving a seamless blend of content display and power generation. This technology represents a breakthrough in the green recycling of retired photovoltaic modules.

To showcase the application of CMT, ColorFuLead Power has constructed China's first colorful photovoltaic energy integration demonstration project in the Dazu Rock Carvings Service Area of the Chongqing-Chengdu Expressway. This project repurposed 819 retired solar cell panels, covering an area of 1,350 m<sup>2</sup> and generating approximately 150,000 kWh annually. It exemplifies the seamless integration of new energy with transportation infrastructure. Additionally, the service area features colorful photovoltaic signs that provide off-grid electricity for monitoring equipment and self-lighting at night. This system serves as a valuable model for the future development of green energy in transportation.