



ON THE GRID

PROJECT: MINING GIANT RIO TINTO HAS ENERGIZED A NEW SOLAR POWER PLANT AT ITS KENNECOTT COPPER OPERATIONS IN UTAH, SHOWCASING A CIRCULAR CRITICAL-MINERALS SUPPLY CHAIN IN WHICH TELLURIUM PRODUCED AT THE SITE IS USED TO MANUFACTURE THE SOLAR PANELS NOW POWERING IT.

SIZE: With this new 25 MW solar facility, together with a 5 MW solar plant completed in 2023, Kennecott now has 30 MW of solar capacity—enough to power approximately 1,026 average American homes annually.

BACKGROUND: Construction of the 25 MW plant began in October 2024 in partnership with Bechtel, was completed and commissioned in October last year, and energized in December. Kennecott began producing tellurium in 2022 as a byproduct of copper refining, making it one of only two U.S. producers of this critical mineral. Tellurium from Kennecott is converted into thin-film semiconductor materials by 5N Plus Inc. in Canada and then supplied primarily to First Solar for the manufacturing of the photovoltaic panels now installed at Kennecott, keeping the entire tellurium supply chain in North America.

BENEFITS: The solar power will help the production of copper and tellurium at the Kennecott operation, both of which are classified as critical minerals in the U.S., underscoring their importance to clean energy technologies and national supply chain security. Kennecott produces both minerals and operates one of only two copper smelters in the U.S., reinforcing its role as a strategic supplier for the energy transition.

PROJECT: IN THE HEART OF CLEARWATER, FLORIDA, A FORWARD-THINKING MEDICAL PRACTICE HAS BECOME A BEACON FOR SOLAR-POWERED SUSTAINABILITY. THE MAHAJAN MEDICAL CENTER, HOME TO FIVE UNIQUE MEDICAL UNITS INCLUDING A GENERAL PRACTICE AND A LUXURY AESTHETICS CLINIC, HAS RECENTLY COMPLETED A STUNNING SOLAR PROJECT. THE PROJECT WAS DONE BY ORIGIN SOLAR, A REC GROUP CERTIFIED INSTALLER.

SIZE: The 70.2 kW solar installation marks a major milestone for both the facility and the installer behind the project.

BACKGROUND: The Clearwater complex faced rising energy demands—from power-hungry x-ray machines to on-site electric vehicles. The goal was to offset as much of the facility's energy usage as possible while capitalizing on federal tax incentives. Rather than a one-size-fits-all approach, the Origin Solar team crafted five distinct solar systems—one for each medical unit in the building. This granular approach allowed them to tailor energy production to specific usage patterns, ultimately achieving a 98 percent offset across the board.

From a technical standpoint, the system featured:

- 156 x REC Alpha Pure-RX solar panels
- Enphase IQ8 three-phase microinverters to eliminate clipping
- IronRidge racking with extended KOB L-foot mounts for a 5° tilt
- OMG PowerGrip mounts, heat-welded into the TPO roof membrane

BENEFITS: The install has a projected six-year ROI—after that, it's just pure savings. This installation wasn't just another job for Origin Solar—it was a statement. As the company is just over two years old, they see this project as the validation of their vision: delivering solar solutions with quality, transparency, and care.

PROJECT: THE NELSON FAMILY VINEYARDS IN MENDOCINO COUNTY, CALIFORNIA, IS NOW POWERING 100 PERCENT OF ITS OPERATIONS WITH RENEWABLE ENERGY FOLLOWING THE INSTALLATION OF A FLOATING SOLAR SYSTEM ON AN IRRIGATION POND.

SIZE: Together with an existing solar system on the roof of the winery, the floating photovoltaic (FPV) system is expected to generate around 200,000kWh of electricity per year, enough to power the winery, agricultural pumps, tasting room, shop, and 12 on-site homes.

BACKGROUND: With the cost of grid electricity rising so sharply, becoming energy independent is expected to have a major and immediate impact on the vineyard operation. And because the system floats on a pond, it does not take a single acre of land out of production. That means the vineyard's full 1,800 acres can be used solely for what matters most: agriculture and supporting wildlife habitat.

BENEFITS: The innovative project enables the family-run farm to operate entirely on clean energy, and is projected to save Nelson Family Vineyards an estimated \$90,000 annually, significantly reducing operating costs while also supporting its commitment to sustainable operation. The floating solar system was designed and installed by Noria Energy, a Sausalito-based renewable energy specialist and an affiliate company of Sunrock Distributed Generation.