

PIONEERING SOLAR PANEL RECYCLING IN MAINE

BACKGROUND

Nautilus partnered with Green Clean Solar, a specialist in solar panel recycling, to address the environmental impact of solar panel waste. This collaboration responds to the growing need for sustainable construction and end-of-life management of solar panels, a critical aspect often overlooked in the renewable energy sector.

PROJECT OVERVIEW

- ✓ **Locations:** Community solar sites in Fryeburg (6.9MW) and Wells (6.5MW), Maine.
- ✓ **Scope:** Recycling of 14.11 tons of damaged solar panels and waste, comprising 512 modules.
- ✓ **Objective:** To divert solar panel waste from landfills and recycle it, reclaiming valuable materials and reducing the environmental footprint of solar energy production.

CHALLENGES

- ✓ **Environmental Concerns:** Addressing the disposal of solar panels containing hazardous materials like heavy metals, which pose environmental risks.
- ✓ **Logistical Complexities:** Managing the logistics of collecting, transporting, and recycling large volumes of solar panel waste.



WELLS & FRYEBURG

FACTS



13.4

TOTAL MW



14.03M

ANNUAL KWH PRODUCTION

IMPACT



9,941

CO2 EMISSIONS AVOIDED (METRIC TONS)



2,212

CARS OFF THE ROAD

STRATEGIES AND SOLUTIONS

- ☑ **Recycling Process:** Green Clean Solar employed advanced recycling techniques to efficiently reclaim materials like silicon, silver, and aluminum from the damaged panels, successfully diverted waste from landfills, reducing the environmental impact of solar energy production.
- ☑ **Collaborative Management:** The partnership underscored the commitment of both companies to ensure environmental responsibility from project inception through its end-of-life.
- ☑ **Decommissioning Terms:** Nautilus includes decommissioning terms in all contracts to ensure that once the lease concludes, the solar system will be removed, and the site will be returned to its original state. Many states have also adopted this provision in their community solar program.
- ☑ **Industry Leadership:** This collaboration set a precedent in the solar industry for responsible and sustainable product management of solar panels, promoting sustainable practices across the industry and encouraging other organizations to adopt similar practices.

The collaboration between Nautilus Solar Energy and Green Clean Solar represents a major advancement in responsible project management and sustainable solar energy production. This partnership not only mitigates environmental impacts but serves as a benchmark for other companies in the industry, highlighting the importance of incorporating environmental responsibility in every stage of renewable energy projects.

