

Solar Removal & Recycling

At the end of a facility's life, Clearway is responsible for removing equipment, restoring the site and managing waste.

DECOMMISSIONING

Dismantling Equipment & Restoring the Land

When a solar project retires, Clearway will remove panels, racking, foundations, fencing and roads, restore the land, and manage all waste. After decommissioning, the property owners will return the land to the activity of their choice.

We develop detailed decommissioning plans in accordance with all applicable federal, state and local laws, as well as the terms of our land leases. We typically work with independent engineers licensed in-state to develop these plans and ensure all requirements are met.

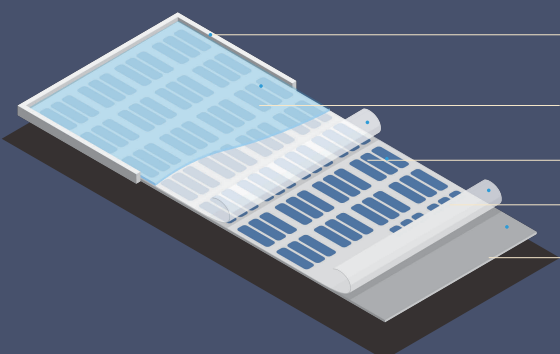
RECYCLING SOLAR PANELS



Clearway commits to reuse or recycle as much of our equipment as possible, keeping solar panels and other components out of the landfill.

A growing network of recyclers and take-back programs are ready to accept materials ranging from solar cells to concrete.

Solar panels largely contain common, everyday recyclables. Glass and aluminum alone make up more than 80% of the panel by weight. Other major components may include plastic, silicon and other metals depending on the model.



Frame Glass

Plastic Film

Solar Cells

Plastic Film

Glass or Plastic Backsheet

Before



During



After



Who pays for cleanup?

As the facility's owner, **Clearway is responsible for decommissioning costs, NOT the community or our landowners.**

Our plans include providing financial security where required to ensure funds are available when the time comes.



Clearway

Safe for people & the environment

Solar panels are designed to ensure no harm to people or natural resources during operations and disposal.

SOLAR PANEL SAFETY

Solar panels are designed to be safe and durable for the long-term. Using the same kind of tempered glass found in hurricane-proof windows, they are made to crack and not shatter.

Clearway currently requires that all solar panels we procure fall within safe limits for environmental exposure, as defined by the EPA's Toxicity Characteristics Leaching Procedure. Meeting these standards ensures that the solar panels are safe for humans and the environment during operations, extreme weather, and disposal.

The very small amounts of conductive metals are either chemically bonded together inside the panel or encased in glass and plastic to prevent exposure to the environment, even if cracked or broken.



Do solar panels affect the soil underneath?

Solar panels do not pollute soil, even when cracked. Instead, they can help enhance soil health over time.

Decades of passive land use and reduced disturbance can allow natural processes to restore and enhance soil health. Efforts to conserve topsoil and grow native vegetation on-site can further enhance benefits to the ecosystem.

Two types of panels

Crystalline Silicon

Solar cells made from sand. Small amounts of lead are encased in glass & plastic layers that prevent leaching.

Thin Film

Solar cells that contain solid Cadmium Telluride crystals are chemically bonded together and therefore cannot leach.

Sources:

U.S. Environmental Protection Agency. (2025, May 2). End-of-life solar panels: Regulations and management.

Electric Power Research Institute. (2022). Improving PV sampling methods for end-of-life leach testing (Product ID: 3002014825, Project ID: 1-111335). EPRI.

Choi, C. S., Macknick, J., Li, Y., et al. (2023, June). Environmental co-benefits of maintaining native vegetation with solar photovoltaic infrastructure. *Earth's Future*, 11(6), e2023EF003542.