



LILY
POND SOLAR

EXHIBIT J

Summary of Facts About Cadmium Telluride Panel Technology

Lily Pond Solar, LLC- Rezoning and Conditional Use Permit
Application



Cadmium Telluride (CdTe) Photovoltaic Solar Panels

Cadmium Telluride (CdTe) photovoltaic (PV) solar panels are a safe, efficient, and sustainable option for the domestic solar industry. Below is a summary of facts about the technology compiled from materials produced by US manufacturer First Solar and findings from third party researchers.

Why CdTe?

- Nearly half of all utility scale solar projects in the US utilize this technology, including the Naval Air Station at Oceana.
- CdTe PV panels are highly efficient products, made by American workers and delivering the quality and durability expected from a product wearing a “Made in America” logo.
- The chemical process of bonding cadmium and tellurium is one that by its nature is an environmental positive. By stabilizing the by-products of mineral mining into efficient semiconductor material able to convert sunlight to energy at an optimal rate, this product eliminates industrial waste otherwise targeted for landfills.
- Being a “Made in America” product, supply chain challenges are minimized, and tariffs are not a concern.

Proven Safety of CdTe

- The solar panels purchased by Energix are CdTe PV panels manufactured in the United States from First Solar, a company with a 20+ year track record of product safety and reliability.
- In the 20 years of manufacturing CdTe PV panels, there has not been a single incident of semiconductor materials leaching out of the panels and creating contamination.
- Over fifty researchers and peer review studies conducted in more than ten countries have confirmed the benefits and safety of CdTe panels.
- According to the Virginia Center for Coal and Energy Research at Virginia Tech, CdTe PV installations “pose little to no risk under normal operating conditions and foreseeable accidents such as fire, breakage, and extreme weather events like tornadoes and hurricanes.”
- The same Virginia Tech research points out that “just as it is improper to assume water can burn because hydrogen burns, it is invalid to treat CdTe as if it had the same properties as cadmium.”

“Although cadmium telluride is encapsulated between sheets of glass and is unlikely to leach out, the PV industry is considering recycling of these modules at the end of their useful life. Recycling will completely resolve any environmental concerns.”

National Renewable Energy Laboratory/Brookhaven National Laboratory (2003, May). CdTe PV: Real and perceived EHS Risks

Long Term Sustainability of CdTe

- Through our supplier partnership with First Solar, Energix has direct access to the only established and operational solar panel recycling facility in the United States.
- Upon being decommissioned, over 90% of the components of First Solar CdTe panels can be recycled and reused in future panels. This means that the initial cadmium component can be stabilized and reused as a source of renewable energy for a virtually infinite length of time.